The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1521.—Vol. XXXIV. LONDON, SATURDAY, OCTOBER 15, 1864. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE

MR. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 22 years.)

Mr. Crofts transacts business, in the way of PURCHASE or SALE, in every description of stocks, but particularly in BRITISH MINES, in no case departing from the position of a broker, at net prices.

*** Holders of mining shares DIFFICULT of SALE in the OPEN MARKET may find purchasers by negociation, through Mr. Crofts' agency. Also, parties requiring ADVICE how to act as to the DISPOSAL, or ABANDONMENT, of doubtful mining stocks may profitably avail of Mr. Crofts' long experience on the market in all cases of doubt or difficulty.

FOR SALE (an offer wanted):—200 South Caradon Wheal Hooper, 5 Copenhagen Railway Company, 250 Vale of Towy (an offer), 200 Prince of Wales, 1 (25th) share in Cwmbrane Lead Mine, 1 (24th) Leawood, 3 Wheal Prosper (Breage), 13 Wheal Curtis, 500 Wheal Hartley (offers wanted for the three last).

*** See Mr. Crofts' letter (important to capitalists), on p. 728.

October 14, 1864.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET,
LONDON, E.C.

James Lane has FOR SALE at nett prices:—5 Basset and Grylls; 2 Buller, £16; 25 Bedol-Aur, 12s. 6d.; 10 Bryntall, £3¼; 50 Crebor, 42s.; 50 Colenso, 12s.; 100 Calstock Consols, 20s.; 20 Carn Camborne, 33s.; 20 Dale; 30 East Providence, £3¾; 20 East Lovell, £9; 20 East Rosewarne, £3; 10 East Chiverton, £2; 20 East Russell; 50 Great Busy, £2⅝; 50 Guriyn, 12s. 6d.; 40 Hallenbeagle, £3¼; 25 Havan (£5 paid), 25s.; 5 Wheal Margaret, £7⅛; 50 New Wh. Rose, 8s. 6d.; 20 North Treskerby, £3; 100 North Devon, £2; 50 Prince of Wales, 4s. 6d.; 10 Rosewarne Consols, 10s. 6d.; 25 St. Day United, 32s.; 5 Sithney and Carnmeal, £7½; 10 Wheal Kitty (St. Agnes), £8; 10 West Caradon, £7½; 50 Vale of Towy, 6s. 6d.

MR. PETER WATSON, 79, OLD BROAD STREET,
LONDON, E.C.

MR. WILLIAM LELEAN BUYS and SELLS all descriptions of ENGLISH and FOREIGN STOCKS and SHARES, INSPECTS MINES, and TRANSACTS all the usual BUSINESS of a STOCK and SHAREDEALER. Parties may rely upon him for sound advice and punctuality in all his engagements.

Mr. Lelean has FOR SALE 100 West Jane, 20 East Rosewarne, 10 North Crofty, 20 East Russell, 50 East Laxey, 50 Great South Chiverton, 100 Bedol-Aur, 20 Great Laxey, 50 East Providence, 100 North Minera, 10 East Treskerby, 10 South Darren, 10 Trelyon Consols, 5 Providence, 50 Rosewarne Consols, 50 Bedford United, 10 Clifford Amalgamated, 1 Devon Great Consols, 10 East Basset, 10 East Caradon, 10 East Lovell, 1 South Caradon, 1 St. Ives Consols, 5 Wheal Seton, 2 West Seton, 10 North Treskerby, 50 East Grenville, 50 North Chiverton, 10 South Basset, 50 South Condurrow, 20 Pendeen, 100 Prince of Wales, 2 Leawood, and 10 Darren.

N.B.—Mr. Lelean's "Mining and General Investment Circular," No. 101, now ready, which will be sent free on application.

Bankers: Messrs. Robarts, Lubbock, and Co.

Offices, 11, Royal Exchange, London, E.C.

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C.
SHARES in MINES BOUGHT and SOLD on commission, at 1¼ per cent., for immediate cash. Bankers: London and Westminster, Lothbury.

RICHARD CLIFT, MINE SHAREDEALER,
late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed.

NOTICE OF REMOVAL.

MR. J. B. REYNOLDS has REMOVED from 54, Threadneedle Street, to 2, HATTON COURT (49, Threadneedle Street).
N.B.—Orders to buy and sell mining shares promptly attended to.

October 14, 1864.

MR. T. ROSEWARNE, 81, OLD BROAD STREET,
LONDON, E.C., has FOR SALE:—

Bedford United, £2¼.	East Russell, £4¾.	North Treskerby, £3⅛.
Clifford Amal., £30½.	East Lovell, £8⅝.	Tincroft, £15½.
Chiverton, £6.	East Rosewarne, £3.	Wheal Uny, £3¾.
Chiverton Moor, £2¾.	East Grenville, £7⅜.	Wheal Seton, £210.
East Basset, £62½.	Great Busy, £2⅜.	Wheal Crebor, 42s. 6d.
East Caradon, £26.	Marke Valley, £4¾.	Wheal Grenville, £6¾.

And is a BUYER of:—

Hingston, £4.	Kelly Bray, 10s.	Wheal Uny, £3⅝.
South Condurrow, 32s. 6d.	Wheal Edward.	West Chiverton, £54.

Capitalists should consult T. Rosewarne immediately respecting mining shares, the present depressed state of the market enables him to select certain mines which will pay cent. per cent. Money advanced on good mining shares.

October 14, 1864. Bankers: Bank of London.

MATTHEW GREENE, STOCK AND SHAREDEALER,
begs to inform his friends and clients that he has REMOVED his offices to 9, GRACECHURCH STREET, near CORNHILL, LONDON.

Mr. Greene continues to advise his friends and clients to pur hase East Laxey shares at present prices, £2¼.

Shares bought and sold on the usual terms.

Bankers: London and County Bank.

MATTHEW GREENE has REMOVED from 27, Austinfriars, to No. 9, GRACECHURCH STREET, near CORNHILL, LONDON.

MR. J. W. GILBERT, MINE SHAREBROKER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON.

J. W. Gilbert recommends the immediate purchase of shares in the following mines, having confidence a rise of 50 per cent. (and above) will take place before Midsummer, 1865:—

No. of shares.		No. of shares.	
1906 ..	East Lovell ..... £8¾–£8⅝	50000 ..	Frontino & Bolivia.. 15s.– 20s
6000 ..	East Carn Brea 6⅜– 7	501 ..	Tres. & Tretharrup. £7½– 8
6000 ..	North Chiverton.... 2 – 2½		(with £12½ per share called up,
1366 ..	North Grambler.... 2¾– 3½		these shares in former working
			sold at £1900 each.)

Oct. 14, 1864.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.

MINES INSPECTED and faithfully REPORTED ON. DEALER in MINING, RAILWAY, and OTHER SHARES.

His monthly "Circular" for August contains a selected list of Cornish and other mines. Forwarded on receipt of six postage stamps.

Wellington Chambers, 75, Cannon-street West, London, E.C.

MR. JOHN BATTERS, STOCK AND MINING
SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C., pays particular attention to British Lead, Copper, and Tin Mines, for which he solicits orders to sell or buy, at nett prices.

FOR SALE:—50 East Chiverton, 30s.; 50 Vale of Towy, 6s. 6d.; 10 Central Minera, 30s.; 30 South Grenville, 11s.; 10 North Grambler.

BUYER of Central Minera.

MR. WALTER TREGELLAS, STOCK AND SHAREBROKER,
3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C., strongly recommends the following mines for investment, which are safe to have a rise in price:—Santa Barbara Gold, North Roskear, North Shepherds, Wheal Lovell, New Rosewarne, New Wendron, East Basset and Grylls, New Trevenen, and Great Wheal Vor.

MR. J. P. ENDEAN, STOCK AND SHAREBROKER,
1, CROWN COURT, OLD BROAD STREET LONDON, E.C.

Having had 25 years' experience in the mining districts of Devon and Cornwall, and three in the London market, with daily information of important changes from qualified agents, also the most authentic reports relating to other investments, he is in a position to afford the earliest information to his clients, and to direct capitalists whether to buy or sell in mines, railways, or other securities.

Investors should apply to him for reliable information relative to the Chiverton Mines, also the Camborne and Illogan districts.

A carefully selected list of sound progressive and dividend shares (certain to give a large percentage immediately) forwarded on receipt of 5s. in stamps.

Orders and telegrams receive immediate attention.

MR. GEORGE BUDGE, SHAREDEALER, No. 4, ROYAL
EXCHANGE BUILDINGS, LONDON, E.C. (Established 17 years), has FOR SALE at nett prices:—50 East Rosewarne, £3; 200 Wheal Pollard, 2s. 3d.; 3 East Basset, £63¼; 200 Vale of Towy, 6s.; 100 Welsh (Gold), 20s.; 150 Calstock Consols; 75 Kelly Bray; 35 Hingston Down, £4 3s. 9d.; 150 Don Pedro, 11s. 3d.; 50 Sithney Metal, 35s.; 20 Trencrom, £3; 100 West Maria and Fortescue; 50 Wheal Hearle, 20s.; 10 East Lovell, £9; 10 Great Wheal Vor, £29½; 25 East Grenville, £7¾; 5 Wentworth Consols, £3; 50 East Russell, £4¾; 20 Chiverton, £6¼; 300 Great Northern; 50 Nova Scotia; 100 Bottle Hill, 2s.; 25 Pendeen; 1 Wheal Seton; 5 Billins; 200 Anglo-Brazilian, 5s. 3d.; 10 East Carn Brea; 25 Hallenbeagle; 50 Wheal Edward; 20 North Crofty; 125 Redmoor, 3s. 9d.; 1 South Caradon; 2 Buller; 5 Bryn Gwlog; 25 Chiverton Valley; 50 New Martha; 35 Carn Camborne; 30 Great Laxey; 50 Unity; 60 Gawton; 10 Marke Valley

GEORGE MOORE,
1, CROWN COURT, THREADNEEDLE STREET.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

50 Anglo-Brazilian, 4s. 6d.	10 Gt. So. Tolgus, £2 6s 9d	20 Sithney Metal, 25s.
10 Anglo-Mex. Mint, £19.	5 Great Fortune, £7½.	2 South Frances.
3 Brynford Hall, £8.	30 Glasgow Caradon, £2⅞.	50 Santa Barbara, 8s. 3d.
20 Chiverton Moor, £2 12 6	10 Great Laxey, £15 7s 9d	50 St. Day United.
50 Buller and Basset, 2s.	50 Gt. S. Chiverton, 26s 9d	10 St. John del Rey.
5 Billins.	20 Gt. Wh. Busy, £2 8s 9d	100 St. David's Gold, 6d.
10 Bedford United, £2¼.	10 Hallenbeagle, £3.	50 St. Just Consols, 4s.
5 Clifford Amalgamated.	1 Herodsfoot, £38⅞.	30 So. Car. Hooper, 4s. 9d.
20 Camborne Vean.	20 Hingston Down, £4½.	2 Stray Park, £20 18s. 9d
1 Carn Brea, £52½.	10 Kelly Bray, 10s. 6d.	1 Trelawny, £19.
1 Cargoll, £38¼.	20 Kitty (St. Agnes).	20 Tolvadden, 20s.
3 Cwm Erfin, £34.	5 Long Rake.	20 Tincroft, £17 10s.
30 Chiverton Val., £1 17 6	20 Marke Valley, £4.	100 Treweatha,
20 Cape Copper, £9⅞.	50 Nant-y-Iago, 4s.	50 United Mexican.
20 Carn Camborne, 32s.	5 North Wh. Crofty, £3.	2 W. Chiverton, £58.
20 Chiverton, £5¾.	50 North Devon, 37s. 6d.	20 Treleigh, 14s.
50 Calstock Consols, 22s.	20 North Downs, 20s. 9d.	10 Treworlis, £9.
10 Central Miners, 36s. 9d.	10 New Wendron, £3.	20 Wheal Edward, 12s. 6d.
10 Cobre, £27½.	10 North Treskerby, £3.	1 Wheal Seton, £205.
5 Cook's Kitchen, £13½.	40 New Vor & Metal Utd., £1½.	3 West Caradon, £6 15s.
10 Cilljah & Went., £3 12 6	100 North Minera, 3s. 9d.	1 West Tolgus, £57½.
100 Don Pedro, 7s.	40 New Martha, 22s. 9d.	30 Wh. Grenville, £6 7 6
1 East Basset, £62½.	2 North Roskear, £21.	2 Wh. Providence, £38¾.
10 East Carn Brea, £6 15s.	30 North Shepherds, 36s 6d	5 Wheal Margaret, £7⅛.
100 East del Rey, 8s. 9d.	50 North Chiverton, £2½.	1 West Frances, £30.
10 East Russell, £4¾.	1 New Seton, £62½.	100 Worthing, 18s. 3d.
50 East Vor, £2.	5 Nanglies, £25½.	10 Wheal Crebor, 41s. 6d.
10 East Lovell, £8.	30 North Basset, 33s.	10 Wentworth Consols, £7.
20 East Grenville, £7 12 6	5 New Rosewarne, £11.	10 West Basset, £8¼.
50 East Clogau, 1s.	1 Providence, £37½.	10 Wendron Consols, £3.
20 East Jane, 22s. 6d.	100 Port Phillip, 18s. 9d.	Wh. Mary Ann, £15¼.
50 East Laxey, 37s. 6d.	30 Prince of Wales, 4s.	50 Wheal Unity, 3s. 6d.
50 East Chiverton.	20 Pendeen, £13½.	30 Wheal Crofty, 12s.
20 East Providence, £3 8 9	10 Par Consols.	1 Wheal Basset, £92.
10 East Caradon, £25¼.	2 Polbreen, £13½.	50 Yudanamutana, £1¾.
50 Fortuna, £3 8s. 9d.	20 Quebrada (£5 10s. paid)	10 Wheal Hearle, 9s. 6d.
10 Gt. Wh. Vor, £28⅜.	20 Rosewarne United.	50 Vale of Towy, 5s. 3d.
100 Gt. Northern Copper, 1s. (call paid).	20 Rosewarne Consols.	20 So. Condurrow, 32s. 9d.
	50 South Grenville, 10s. 6d.	10 Wheal Uny, £3 12s. 6d.
		1 West Sharp Tor, £62.

2, Adam's-court, Old Broad-street, October 14, 1864.

MESSRS. VIVIAN AND REYNOLDS, 37, OLD BROAD
STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS of MINES, COMMISSION, and GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAY, and EVERY OTHER DESCRIPTION of STOCK.

Commission on share transactions 1¼ per cent. on £100 and above, and 2½ per cent. on less sums.

NOTICE OF REMOVAL.—Mr. EDWARD COOKE has REMOVED from No. 75, Old Broad-street, to No. 2, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.

MR. EDWARD COOKE, MINING SHAREBROKER,
2, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.

Mr. Edward Cooke has removed to the above address, where all communications on matters relating to business will meet with his usual attention.

Oct. 14, 1864. Bankers: Alliance Bank, Lothbury.

MR. GEORGE BATTERS strongly recommends his friends to buy West Chiverton, Chiverton, Herodsfoot, South Caradon, Devon Great Consols, Great Wheal Vor, Prosper United, Wentworth Consols, and Sithney Wheal Metal for investment. These shares will pay good interest for money at present quotations.

76, Old Broad-street, London, E.C.

MESSRS. WARD AND JACKMAN, SHAREBROKERS,
2, ADAM'S COURT, OLD BROAD STREET AND
MINING EXCHANGE, LONDON, E.C.
Bankers: London and Westminster, Lothbury.

MR. H. WADDINGTON, MINING AND SHAREBROKER,
20, THROGMORTON STREET, LONDON, E.C.

Shares in railways, mines, &c., bought and sold on the usual commission.

Clifford Amalgamated, Grambler and St. Aubyn, East Grambler, and Great South Tolgus should be bought at once. West Seton shares should be bought at the present reduced price.

MR. G. D. SANDY, SHAREDEALER, No. 48,
THREADNEEDLE STREET, LONDON, E.C., has SPECIAL BUSINESS in the FOLLOWING SHARES:—

		3 Stray Park.
80 Bedol-Aur.	100 Great Retallack.	30 Tolvadden.
100 Caradon Hill.	50 Great South Chiverton.	50 West Great Work.
20 Camborne Vean.	20 Great Laxey.	20 Wheal Agar.
2 Clifford Amalgamated.	3 Herodsfoot.	1 Buller.
3 East Basset.	100 Kelly Bray.	3 Tremayne.
20 East Grenville.	5 New Rosewarne.	35 Wh. Kitty (St. Agnes).
50 East Laxey.	50 North Downs.	50 Wheal Grenville.
20 East Rosewarne.	25 North Shepherds.	10 Wheal Ludcott.
10 Gonamena.	30 North Treskerby.	3 Wheal Reeth.
15 Great North Downs.	20 Pendeen Consols.	200 Unity.

N.B.—Sellers or buyers of any of the shares named can be treated with at close prices, nett or on commission.

A selected list of *bona fide* shares for investment forwarded gratis.

Current Daily Price List may be obtained as usual.

GEORGE RICE, SHAREBROKER, 5, COWPER'S COURT,
BIRCHIN LANE, LONDON, (22 years' experience), has SPECIAL BUSINESS as BUYER or SELLER, for cash or account, in the FOLLOWING SHARES:—

	Closing quotations.		Closing quotations.
Clifford Amalgamated	£30 –30½	Great Wheal Vor	£28 –28½
Chiverton	5¾– 6	Nanglies	24 –25
East Russell	4¼– 4¾	North Treskerby	3 – 3¼
East Carn Brea	6⅝– 6⅞	Wheal Crebor	2 – 2⅛
East Caradon	25 –25½	Wheal Grenville	6⅛– 6⅝
East Wheal Lovell	8¼– 8⅜	West Chiverton	55 –60
East Wheal Grenville	7 11 8– 7¾		

Money advanced on mining shares.

Oct. 14, 1864. Bankers: Bank of London.

MR. WILLIAM BARTLETT has the FOLLOWING SHARES FOR SALE—

5 Nanglies, £26.	50 Kelly Bray, 12s.	20 Wheal Agar, £2½.
100 Lady Bertha, 6s.	10 Long Rake, £1¼.	20 East Providence, £3⅛.
10 East Caradon, £25¼.	10 East Vor, £1¾.	10 Great Vor, £29½.

Also, SPECIAL BUSINESS in the following:—

East Basset.	North Treskerby.	South Caradon.
Clifford Amalgamated.	Providence.	Great Fortune.
		Wheal Seton, &c.

SHARES WANTED:—4 Trelawny, £20¼.

An OFFER WANTED for 5 Spearne Moor, and 20 Wheal Caradon.

Offices, No. 2, Bucklersbury, London, E.C.

Bankers: Alliance Bank, Lothbury.

JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET,
AND MINING EXCHANGE, LONDON, E.C.

	Closing Prices.		Closing prices.
East Caradon.....	£24¾–25¼	New Wendron	£ 3⅞– 4¼
East Grenville	7¼– 5⅝	South Condurrow.....	34s.–36s.
Grenville	6⅛– 5⅜	West Tolgus	56 – 60
Great Vor	28 –28⅛	Seton	200 –205

J. Hume's Circular for October will be sent on receipt of six stamps. Annual subscription 5s.

South Condurrow.—This mine is destined to take a leading position, and will soon be a dividend mine.

Mr. Hume recommends also West Tolgus for a great rise. New Wendron is improving, and should be bought. Particulars supplied.

Business transacted on commission or nett.

Bankers: London Joint-Stock Bank.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S,
BISHOPSGATE STREET (late of 48, Threadneedle-street, London, E.C.), STOCK AND SHAREDEALER. (Established Ten Years.)

BUSINESS TRANSACTED in EVERY DESCRIPTION of SHARES, at closest market prices, either nett or on commission. Reliable information given either personally or by letter, upon the purchase, sale, or exchange of every description of stock.

FOR SALE:—50 Kelly Bray, 10s. 9d.; 40 Crebor, 41s.; 60 Bedol-Aur; 20 East Laxey; 25 South Chiverton; 40 Wheal Unity, 3s. 3d.; 30 Vale of Towy, 6s. 9d.; 25 South Grenville, 10s. 6d.; 3 New Rosewarne; 25 Bryntail; 20 South Condurrow, 34s. 9d.; 5 East Russell, £4 11s. 3d.

MR. T. P. THOMAS, MINING AGENT AND
AUCTIONEER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL
MINING SHAREDEALER,
2, PINNER'S COURT, OLD BROAD STREET, LONDON.

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE,
LONDON, E.C., has the following SHARES FOR SALE, free of commission:—

2 Stray Park, £22.	20 South Lovell, £2.	20 New Martha, 23s.
50 Glasgow Caradon, £3⅜	20 E. Rosewarne, £3 18 9	20 Treworlis, £1⅞.
20 Great Laxey, £15½.	20 North Basset, 33s.	100 St. David's Gold, 2s.
20 East Carn Brea, £7.	10 Cape Cornwall (£2 10s. paid), 27s.	20 South Darren, 30s.
50 Prince of Wales, 3s. 9d.		10 New Wh. Vor, 1s. 6d.
50 Vale of Towy, 5s.	20 Hallenbeagle, £3.	200 West Treveiyan, 1s. 6d.
20 North Shepherds, £2.	50 Wheal Crebor, 42s.	100 Trumpet United, 6d.
25 East Wheal Vor, £2.	15 St. Just United, £2.	

Parties of respectability can have transfers registered into their names previous to payment. Bankers: London and County Bank.

MR. F. W. MANSELL, MINING SHAREBROKER,
75, OLD BROAD STREET, LONDON, E.C.

MR. WM. BIRDSEY, MINE AND SHAREBROKER,
No. 2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

W. Birdsey is a BUYER of 500 (or any part of) Alten shares, at £2 per share.

MR. JOHN R. PIKE, GENERAL SHAREDEALER,
OFFERS his SERVICES to INVESTORS.
3, PINNER'S COURT, OLD BROAD STREET, LONDON.

SHARES WANTED IN THE FOLLOWING MINES, most of which are at the same time strongly recommended for an early and immense rise in value:—

South Condurrow.	Wheal Jane.	East Lovell.
Bryntall.	Wheal Margaret.	East Grambler.
Clifford Amalgamated.	Camborne Vean.	Trencrom.
Carn Camborne.	Kitty (Lelant).	Rosewarne United.
New Rosewarne.	South Basset.	West Caradon.
	East Grambler.	Grambler and St. Aubyn.

Friends and investors, if they would consult their own interests, will do well to act upon this advertisement, and not treat it as one of the empty statements so often put forth in the public journals. HUBERT BARNES RYE.

Mining Offices, 77, Old Broad-street, London, and Mining Exchange, Oct. 14, 1864.

JAMES B. BRENCHLEY has SPECIAL BUSINESS, for cash or account, at nett prices, in the FOLLOWING SHARES:—

5 Clifford Amalg., £30½.	20 East Grenville, £7 11 3	20 North Treskerby, £3.
10 Carn Camborne, 32s.	20 Frank Mills, £4¾.	5 West Caradon, £6¼.
5 Cook's Kitchen, £12½.	30 Gt. So. Tolgus, £2⅛.	25 Wheal Crebor, 42s.
1 East Basset, £61½.	20 Hallenbeagle, £3¾.	1 West Seton.
15 East Carn Brea, £7.	5 Kitty Lelant.	

Parties treated with in the above and other shares, and also in those temporarily unmarketable.—78, Old Broad-street, London, E.C., Oct. 14, 1864.

MR. THOS. THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.

WILLIAM SEWARD, MINING BROKER, STOCK AND
SHAREDEALER, 19, THROGMORTON STREET, LONDON, E.C.
Commission, 1¼ per cent. on all transactions.

WILLIAM WARD
29, THREADNEEDLE STREET, LONDON, E.C.

WANTED:—An offer for 170 Worthing shares, and for Chiverton Valley, East Chiverton, and Camborne Vean.

MR. E. GOMPERS, MINING OFFICES,
3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent. Bankers: London and Westminster Bank.

MR. THOMAS CARTHEW, MINING OFFICES,
17A, SISE LANE, BUCKLERSBURY, LONDON, E.C.
Reliable information respecting mining generally can be obtained by applying as above.
Bankers: Robarts, Lubbock, and Co., 15, Lombard-street, London.

FOR SALE (any reasonable offer accepted):—20 Tin Hill, 6 East Brookwood, 30 Cornish Clay.—Address, "M. M. M.," 16, Ludgate-street, Ludgate-hill, London.

FOR SALE, FIFTY NORTH POOL SHARES (or any part), at £3 10s. per share, cash.—Apply to Mr. T. Carter, mine sharedealer, Camborne.

TWENTY NORTH DEVON SILVER-LEAD SHARES FOR SALE, at 32s. 6d. nett.—Address, "N. D. S. L.," *Daily Press*, Bristol.

DALE MINING COMPANY (LIMITED).—WANTED TO PURCHASE, SHARES in the above MINE.—Address, with number of shares for sale, and lowest price, to Mr. Bow, 5, Lambton-terrace, Westbourne-grove, W.

NOTICE OF REMOVAL.—Mr. JOHN GREEN begs to intimate to his friends and correspondents that he has REMOVED from No. 27, Austinfriars, to No. 9, GRACECHURCH STREET.

WANTED, to go abroad, a PRACTICAL MAN, who fully UNDERSTANDS MINING OPERATIONS, and to EXPLORE and ASCERTAIN the VALUE of the lodes. He could be home again in two months.—Apply by letter, to "K. T.," Mining Journal office, 26, Fleet-street, London, E.C.

WANTED, by a MINING ENGINEER, who has had extensive experience in the management of fiery collieries, a SITUATION as MANAGER or VIEWER. First-class references given.—Address, "E. D.," Mining Journal office, 26, Fleet-street, London, E.C.

WANTED, by a gentleman who has had nearly 20 years' experience in business, a RE-ENGAGEMENT. Has been accustomed to CORRESPONDENCE, BOOK-KEEPING, and the DETAILS of a MERCHANTS' OFFICE and IRONWORKS. Satisfactory references can be given.—Address, "N.," Mining Journal office, 26, Fleet-street, London, E.C.

THE ADVERTISER, having had considerable experience in practical mining, and a knowledge of assaying, is DESIROUS of ENGAGING HIMSELF to a respectable company to proceed to any part of the world, to EXPLORE and REPORT on MINERAL PROPERTIES. References given of the highest respectability.—Address, "C. B.," Mining Journal office, 26, Fleet-street, London, E.C.

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A Monthly Investment Circular on application.

Original Correspondence.

BORING-MACHINERY—ITS INVENTION.

Sir,—In last week's Journal was a letter from Mr. Green, challenging me to refute his statement that the boring-machine for which I obtained the first-class silver medal at the late exhibition of the Royal Cornwall Polytechnic Institute was merely a copy of a machine which he had invented. I am glad to say that this is a statement that can be refuted, and proved to the contrary, as easily as it has, in fact, been groundlessly and unwarrantably asserted. Mr. Green having appeared to me ambitious of distinguishing himself as an underground engineer, requested my permission to make a couple of single boring-machines; and taking into consideration that the royalty which would be paid to me before the sale would be a certain gain, and that no discredit would attach to my invention in the event of their failure, provided I took the necessary precaution of disowning any hand in their design, I gave him authority to construct two only, for which he paid me the royalty agreed upon; and, notwithstanding all his blandishments and endeavours to enlist me in a putative relationship, I adhered to my determination of having nothing to do with them. If he could have realised a fortune out of them, no one would have been better pleased than myself. This is how he came to make them; and as long as he confined himself to claiming any amount of credit for them, and talking himself into a belief of their capability of performing any imaginary quantity of work, he was perfectly welcome, but I am in duty bound, in respect to the property in the patent, to dispel any illusions he may endeavour to propagate as to the identity of his with any machines of my own designing, and confine my observations with respect to them to simply what is necessary to elucidate their difference.

Mr. Green, in going what may be termed the whole hog in claiming the invention, has inadvertently made a most damning admission. The machine proper having only three motions, and out of these I am stated to have copied one only, and this one is said to be the valve-gearing, to the efficiency and simplicity of which Mr. Armitage was lately kind enough to testify. It so happens that this very motion is constructed on an entirely different principle from the one I saw on Mr. Green's machine, and which I had occasion to condemn as utterly worthless in the very first machine I made. Let him read Mr. Armitage's description of it carefully, and he can judge for himself. Thus much for the boring-machine itself. Take three from three, and nothing remains for Mr. Green to claim in the machine. The principle of construction and working of this machine is all that I have ever attempted to claim in the patent or otherwise.

With reference to the pillars, moveable bar, and swivel washer joint on which the machine itself is fixed, Mr. Green has about as much claim to originating its mode of construction as I have. He adopted them without any acknowledgment to the originator (Mr. Henry G. Williams, a really talented and practical engineer, who was engaged with me from the commencement of my undertaking the construction of the machine), and I, by his permission and by agreement, had them made almost entirely after his designs. The stand, which forms no unimportant part of the machine, is made so as to obtain the utmost attainable amount of rigidity and strength with the least possible amount of material, and is constructed of hammered iron, after the design of Mr. Rouse, the resident engineer of the Tavistock Ironworks and Steel Ordnance Company.

Capt. Penrice may not be aware of it, but, according to Mr. Green, he is indebted to the latter gentleman for all the ideas that enabled him to construct his boring-machine, which is on an entirely different principle from mine. Mr. Green wrote about it several years ago, I do not know how many; but this I do know, that the year before last he wrote in the *Mining Journal* to the effect that the difficulties that he saw were to be encountered had deterred him from ever undertaking the work of making one, but that he was educated in a place where they were celebrated for finding out things (I presume he meant the public to form their own inferences), and now it appears I have to congratulate him on having discovered the Royal road to learning. Edward S. Crease.

BORING BY MACHINERY.

Sir,—Through the *Mining Journal* I beg to heartily thank and praise those who have, and those that are, devoting their time and abilities to boring by machinery. I confidently state my belief that perfect boring machines will ultimately be invented, and I consequently entreat our engineers and others to continue unceasing endeavours towards perfecting those all-important objects. I mean that we may blessed with economic machinery to assist us in our underground explorations. In my opinion, no human being can fairly estimate the benefits which mining will gain by successful boring machinery. I suggest wherever the machines are first placed that there should be ground previously opened by manual labour, as thereby convenient space will be obtained, and perfection more speedily gotten. It is to be hoped after that the machines will open ground enough for their perfect convenience in working. To fairly estimate the cost, men must be employed who are thoroughly qualified for placing a fair debtor and creditor account of all the expenses attendant the working the machinery; regard must be had in the credit for ground spent, including all its advantages. It is immaterial as to the source from whence the most effective motive-power can be obtained; I mean whether it be steam, water, or atmospheric, provided that the debit and credit accounts are correctly kept and understood. With improved machinery there will be, doubtless, danger to life and limb, also difficulties to encounter, and improvements to be made; consequently the machinery should be placed and watched by men of proved ability, as thereby it is hoped the blessed advantages will be gained. I shall grievously lament if the trial machines are entrusted to men who are not safe-going in erecting and managing mining machinery. I believe that there would be readily subscribed a purse of fifty guineas or more as a reward to the party who had first driven (say) 20 fms. in one level and 20 fms. in another level by the machinery, and then a careful comparison made with the same length of ground driven in the same two levels by manual labour; such estimates would carry off all doubts.—*Oct.* 12.

One who has seen some Service.

STEAM SUPERSEDED—LENOIR'S GAS-ENGINE.

Sir,—Although frequent reference has been made in the columns of the *Mining Journal* to the admirable little gas-engine invented by Mr. Lenoir, it has only in one or two instances been adopted in England, owing, probably, to the circumstance that in the places where the gas-engine would be most advantageous the price of gas precludes its use altogether. It is well known that the gas-engine can only be applied with economy where power is required (say) for an hour daily, or three or four hours weekly, and the engine has to remain idle the rest of the time. In these cases steam is inapplicable, because the cost of getting it up is more than the power used is worth, but with the gas-engine it is different; the machinery can be set to work within half a minute of the turning on of the gas, and not an inch of gas need be burned after the work is finished. With gas at less than 4s. per 1000 cubic feet there can be no question of the economy of the gas-engine, but where gas is costly, (say) 7s. or 8s. per ton, the saving it quite unimportant.

It appears, however, that an Irish gentleman, the Rev. Mr. Largan, of Garristown, has contrived a process of obtaining gas in an apparatus only about a cubic yard in size, at a cost of only about 3s. per 1000 cubic feet, which apparatus could be conveniently made to form the foundation of the engine; in addition to which he proposes to substitute magneto-electricity for the voltaic electricity at present employed. With these modifications, the Lenoir engine would be the cheapest and cleanest engine possible, and would, doubtless, come into very general use for every purpose where under 5-horse power is required periodically for a short time. As it has been very truly remarked, there are many purposes, even in connection with domestic affairs, in which such an engine of small power might be employed, such as the pumping of water, filling of cisterns, &c., whilst in connection with agricultural pursuits the gas-engine would be more economic than any other motor known.

But apart from the gas-engine, I think the Rev. Mr. Largan's invention might be utilised in a variety of ways, for it must be apparent that if an explosive gas can be produced at 3s. or 3s. 3d. per 1000 cubic feet, such gas could readily be converted into first-rate illuminating gas for (say) 6d. per 1000, which would give an abundant supply of the best light-giving material for general purposes at the same price that it is obtainable in the largest cities, where there is an enormous demand. The particulars of the process which Mr. Largan employs would, I am sure, be very acceptable to your readers, and would be sure to lead to the more extensive use of gas. Returning to the gas-engine, I trust the ingenious inventor will also give your readers a description of the magneto-electric apparatus, which has likewise an importance in addition to its use in exploding the gas to work the gas-engine. From the purpose to which it is to be applied, it cannot be doubted that Mr. Largan's is a cheap way of producing an electric spark, and this is precisely what is required for electric blasting; so that Mr. Largan may be the means of lessening the numerous accidents in mines arising from the premature explosion of the holes charged for blasting, and the uncertainty as to whether the fuse has ceased to burn.

Dublin, Oct. 7. J. S.

UTILISING THE SLAG OF BLAST-FURNACES.

Sir,—I am sure that your readers would like to learn more of the method of utilising the slag of blast-furnaces, which was brought before the British Association at Bath. The reports of the paper on the subject, given in the daily papers, were so curt as to be unintelligible. I need not say that the subject is of immense importance. Would the author, or any other of your readers oblige by supplying a more complete report? A patent for utilising blast-furnace slag was taken out by Mr. Parry, of Ebbw Vale, I believe, early in the year. What is its nature, and is it at work? Perhaps the insertion of this letter in your Journal may elicit useful information.

Subscriber.

BLAKE'S STONE-CRUSHING MACHINE.

Sir,—In the letter of Mr. H. T. Rawle, published in last week's Journal, the invention of Blake's Stone-Crushing Machine is erroneously attributed to Mr. Pope—a gentleman who has manufactured a machine in imitation of Blake's (after visiting the works of Mr. H. R. Marsden, of Leeds, who is the sole authorised maker of Blake's machine in this country), but so far as is yet known, has not sold one. You will remember that when you originally noticed that a patent had been taken by Mr. Pope, you remarked that "Mr. Pope has patented an imitation of Blake's stone-crusher, the sole difference being that he uses eccentric rollers instead of toggles."

The proprietors of Blake's machine will, of course, commence legal proceedings as soon as Pope's machines are offered for sale, but in the meantime it may be stated that machines were made by Blake's people with the eccentric, precisely as Pope has now patented, more than six years since, and that the eccentric was abandoned as worthless in comparison with the toggles. But even assuming the eccentric to be new, Pope's machine would still be an infringement of Blake's invention, of which it is an exact copy in every essential particular. All who are practically acquainted with the subject will at once see the disadvantages of the eccentric, but, if necessary, I will explain the reasons which led to its abandonment when it was originally tried. B.

MINING IN WALES—TRACTION-ENGINES.

Sir,—As you are the recognised organ of the Mining Interests of the kingdom, I trust the present communication may be found of sufficient general interest for insertion in the Journal. I have now been connected with the Dyfngwm Mines about 20 years, and have had something to do with Welsh mines for the last 30 years. During that time I have had much experience of the *wants* of mines, not only in those I was more immediately personally connected with, but likewise in others of which I was only a silent observer. One thing we must give up in water, as a rule, and that is, the idea of a *never-failing supply* of water for mining purposes on an extensive scale. During the droughts of summer and the frosts of winter water-power has failed, and will fail again. Your columns, during the present year, have repeatedly borne witness to the universal cry of mining agents for the requisite power they were in want of. The Dyfngwm Mining Company, several years ago, fully convinced of the inutility of depending on water for the working of their mines, after mature consideration, and getting the best advice, came to the conclusion to put up a steam-engine, as an auxiliary for pumping and drawing purposes whenever their supply of water failed them. That engine has done its work well for several years, and has been the means of sinking the mine to the 82 fm. level. It is a horizontal engine, with a pair of 10-inch cylinders, works a line of rods 150 fms. in length, and a series of 7 and 8-in. drawing-lift of pumps to a depth of 82 fms.; stroke 5 ft., and four strokes per minute required to keep the mine in fork. To those conversant with mining, the above particulars will show the quantity of water in the mine. Of course, we only worked the engine for pumping during a part of every day, and during that time the stream of water is allowed to accumulate, so that at 7 o'clock every morning we have generally a supply of water till the afternoon for pumping by a 55-ft. water-wheel, and for crushing our ore stuff by another 40-ft. wheel. Our mine is situated on the top of the Dylive Hills, or about 1500 ft. above the level of the sea. Our nearest railway station is at Machynlleth, a distance of 10 miles, by way of what may be fairly stated as the worst constructed turnpike-road in the kingdom; consequently, our greatest want has been a constant supply of coal. At an interview with Mr. Easton, the eminent engineer, and his foreman, when making enquiries respecting pumping-machinery, I informed them of what our little engine was doing. It was termed by them a "great wonder." No doubt it is to be wondered at an engine so small doing such an amount of heavy work. It is, however, no wonder that pumping the water and drawing 20 large kibbles an hour of heavy stuff was too much for it. It is very efficient at either pumping or drawing alone, and for the future will be solely employed in drawing.

I am now coming to the chief point I had in view in sending you this communication. Our finance committee and shareholders determined upon having additional steam-power, and, after mature deliberation, they agreed with Messrs. Aveling and Porter, of Rochester, to supply them with one of their most powerful traction-engines—one that would convey their lead ores to the railway station, would bring back all the coal required for itself and the present engine, and also one that would work the pumps in dry and frosty weather. Considering the state of the road and its length, it was rather a bold venture, but the order was given, and on Friday last the "Dyfngwm" engine arrived at Machynlleth. Early on Saturday morning we were all on the *qui vive* to see the engine and loaded wagon make the first trip into the hilly country. The Dylive-road, though very uneven for the first four miles, and having a steep pitch or two, with a very awkward double narrow turn at Pontfaen-bridge, still its real steepness commences at four miles from Machynlleth, and in the next four miles has a rise of about 1000 feet. It has pitches rising one in six, one in five, and a very short one of about one in four. There is no wonder that David Jones, the cattle drover, made "a bet if the engine would reach Dyfngwm it would reach the moon." It has, however, accomplished the feat, it has done it in a business-like way, done it efficiently, done it well, and done it with plenty to spare. On Monday it took down 6 tons of lead ore, and brought back an equal quantity of coal. The road officials find it will do more good to the road than harm, and have a number of men at work putting the road in a more fit state for the reception of a traction-engine. The road surveyor said, "Bring two or three more as soon as you can." I will in a short time send you further information as to the progress the engine makes. The commencement could not be better. I cannot by any possibility claim the least share of the honour of introducing this most efficient engine to the Welsh mines on the Welsh Hills; that honour is mainly, if not entirely, due to Mr. John Young, the Chairman of our finance committee, and Mr. George Hadley, our purser and London manager. Both these gentlemen accompanied the engine from Machynlleth up to the Dyfngwm Mines, and its full and complete success amply rewarded them for all their anxiety and trouble. Edward Davies.

Dolcaradog, Machynlleth, Oct. 12.

MINING IN OLDEN AND MODERN TIMES.

Sir,—There is much said about the science that is brought to bear upon mining nowadays; but, with all this, the important improvements in machinery, and the cheapness of the materials, mining does not flourish now as it did in years gone by. There does not appear to be such perseverance. Formerly the mines carried on on the Cost-book System were better governed than now. If there were a good kindly lode discovered, it was, in nine cases out of ten, offered to some mining gentlemen who had the means to work it, and there were meetings of shareholders every other month, and calls made to meet the current expenses. I have known mines to be carried on till there has been from 80,000*l.* to 100,000*l.* expended on them, and after that the shareholders were fairly remunerated for their patience and outlay. All this capital was invested through the recommendation of their own managing captain. Perhaps the lode or lodes had disappointed him several times, and, through this, he had disappointed the anxious shareholders as many times, yet he saw something in the lodes, &c., that he felt assured they would turn out well. For instance, I refer to the Clifford Amalgamated; their outlay was 87,000*l.* Since that dividends have been declared to the amount of 94,032*l.*; selling price of the shares, 89,400*l.*: total, 183,432*l.*—profits, 96,432*l.* Take another instance:—Wheal Seton, outlay, 23,161*l.*; dividends and present price for the mine, 723,939*l.*: profits, 700,778*l.* The present system of mining is different. If there are 6000*l.* or 7000*l.* laid out, and no dividends, or the mine not self-supporting, there is a great demur. Inspector after inspector is called in, and one gives an opinion one way and another the other, and ten to one if the mine be not stopped, or the captain discharged, perhaps at a time when the mine is on the eve of paying cost, particularly if the shares are not on demand in the market; be the prospects as inviting as they may, and the agent possessing the qualifications of sound judgment, economy, and every other quality, yet he must give place to some other. How frequently do we see parties eager to get shares in a mine at a high figure, when perhaps there is not the least indication in the lodes to warrant it, and good prospects left unnoticed. Take the Crowan Consols for example. This mine, at the 30 fm. level, presents unmistakeable prospects for a rich and lucrative investment. But few mines have turned out so much for the depth. The lode in the 30 fm. level, west of the shaft, is fully 4 ft. wide, with a good leader of copper in it, and promising great things ahead and at the 40; yet no one cares to take up the shares at par, although if the 573 unallotted were subscribed for there would be ample capital to bring the mine into a good dividend state of working. There are other lodes to intersect, of equal promise. The situation cannot be surpassed. The plant and machinery are worth all of 16,000*l.*—cost about 30000*l.* An Old Miner.

Mr. N. ENNOR'S VIEWS ON LODES AND FAULTS.

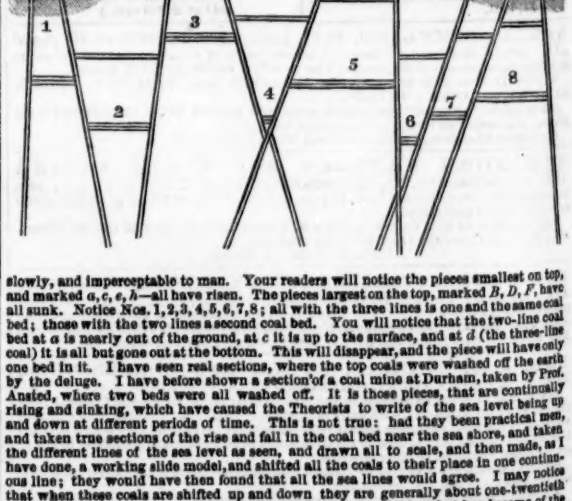
ENGLAND'S MINING SCHOOL—NO. XIII.

Sir,—In my last I finished, for a time, with Granite, and here take up the subject of Lodes and Faults. Before I go into it, I have first to make a few remarks on Man. In the beginning God said "*let us* make man in our own image, after our likeness." Then, let us analyse man, to see what he is, and how made. Look at him when only a span long: he was formed a perfect model, with bone, flesh, blood, sinews, arteries, ligaments, nerves, and sensation. All these grow on together, all keep pace with each other, till he is 6 ft. high, or to maturity. Then, notice the seat of action is the heart, from which the blood flows out through the arteries and back through the veins, to keep up animation and to stimulate his growth. Every artery starts from the heart, which I term the fulcrum. The arteries carry the blood and vital spirit out, the veins return it. Here is the starting point of man: his body is said to contain 15,000 movements; then I ask if a man is to be found vain enough to suppose he would work efficiently if twenty of these movements were out of working order, or even if only one of the main veins or arteries were severed he would thrive, and grow to be a vigorous man? I think not. Then let us suppose that he was born a mere lump of flesh, without veins, or arteries, or movements; would he ever grow to a full-sized man, fit to be exhibited as a specimen of an all-wise creation? I say not. Then I notice that God said "Let us make man in our own image." Let us suppose God had just created the earth, and when he used the words *us* and *our own* image he coupled the earth and all he had created with himself, omnipotent. Then we have fair grounds for supposing that God created man as an image of self divinity and the earth's likeness. Then, let man look at the image of his fellow and then carefully at the earth, and he will find that man was formed after the fashion of the earth. If he studies nature he will find that the earth is not a lump of clay, made just for man to stand and work upon: it is a mass of moving matter, with veins, arteries, ligaments, and nerves, and I may say ten times ten thousand movements, all working under elementary laws, and forming, not only geometrical figures, but every figure and colour known. Then let man look at what are termed lodes, and faults, and elvans; what are they but veins, arteries, and ligaments? Would the earth work one hour without these? I say a man might as well work without them as the earth, were there no veins or arteries. Show me how water, gas, or atoms of matter could have passed from the earth's heart to the surface to produce the first vegetation? Is there a man to be found on the earth so low and so mean in his imagination as to suppose the earth could work for an hour without these veins and arteries? I should think not? Should such a man exist, I would seek him in the ranks of the Professionals who attended the Bath meeting. I say, without fear of contradiction by any man, that the earth cannot possibly work without its veins and arteries, connected with a centre, or fulcrum—most likely a hollow: be what it may, it is the earth's laboratory, but not, as the Bath men say, a fire. The space may be thousands of miles, or it may be but fifty miles; but we have a clue of evidence of its being one-third of the earth. Be that as it may, I say there is the generating power, from thence spring the seed of electricity—the life of all creation. Its movements are governed by elementary laws and polarity. The arteries and veins were, are, and ever will be at work, through all time. They are connected to some interior great seat of action, and come to the surface through every newly formed layer, just as they grow with the child to manhood. In man they are covered only by the skin, in the earth only by alluvial soil. The Bath Professionals tell us that the lodes we get our ores from in the earth are only cracks, that became filled with minerals. I say good Lord deliver us from the tuition of such. Were they to argue this with me, and I were to produce my drawings and models, I think I should make those who were not past shame blush. They talk about this and that hill being thrown up by volcanic eruption; I say, show me the holes, or cones, that such matters come up through, either hollow or solid. I should be glad to see such a place. I have seen continuous elvans and trap dykes, but I never saw a round one yet. They talk of hills being thrown up; I say, look at my diagram, and show me how it is possible for so many hills to be thrown up without destroying every vein and artery it contained. I defy anyone to find one injured. They may be found shifted and shortened by faults, nothing further. I may notice that God, when making the world, might have conceived he was making a world to live for ever, and arranged it with every required vein, and artery, and movement for so doing. I defy anyone to show me a single defective part that will prevent it doing so. The artillerymen from Bath, and the men from the training school, may fire their long shots at her, but such bosh goes but for little in the minds of practical and well-informed men, and for nothing in the mind of the Creator.

I am aware that to carry out my views on this subject I have to combat the vague theories of nearly all the professional men who have written for the last century: this I am not alarmed at, as I know them to be men of strong imaginations, with little or no practice to guide them as to the earth's formation, or its prevailing laws. The would-be leading ones, and such as attended the Bath meeting, are men who claim knowledge from their college education. I admit that education is good for any man, but it is a well-known fact that most of the colleges turn out twenty dunces to one Newton, Davy, or Stephenson. The men of this class are often bigots, who, from want of sound intellect, say what they think, and when opposed by practical men attempt to treat them dogmatically. But let me tell them that theory never was, neither will it ever be, a match for practice. Look at the learned men of past ages; did not their learning, for want of practical knowledge, lead them into heathenism? I ask if we have any better prospects in view as to the men at Bath? What must we expect to hear from them next? May it be that bats come natural, and will ultimately become camels; or that owls were their own creators, and will become elephants? These will certainly be strange occurrences to take place in the 19th century, but not more strange than what they have been recently telling us, as to God having made a defective world, and being necessitated to burn and to reconstruct it. Let me ask them to show us, by a well-grounded argument, the why and the wherefore for its having been so made. It would appear that they mistrust God's ability to call a world into existence in a day or even an hour. Such trumpery as was put forth at Bath by supposed well-educated men is a blot on common sense. It is not J. Jones I wage war with, but with men who outrage common sense. Will any or all of them combined show why God was necessitated to burn the world before he put man on it? I bow to the man or men who will come forward with a well-grounded argument to prove this, not otherwise. I am led to believe that such fire would have expelled or evaporated every metal and mineral, also water, and every other evaporating substance, from the earth. I am at a loss to conjecture how these men will attempt to explain the means used for bringing it back again, and when the creation took place. Was it before the fire was kindled, or after it was quenched? Surely they will give us a detailed account as to these points.

I will shortly take up the apparently unknown hot water in the United Mines, as I published my views on it nine years since, and gave Mr. W. Smyth a hint where to find a second hot spring within his own round of duty, advising him to find the temperature, and to record it, as a guide as to whether its heat increased or decreased. Had a shell-hunter found a bivalve it would have been recorded and known to every member of the Geological Society, but valuable discoveries to aid the British public are neglected, if they emanate from men who venture to assume that a member of the Know-nothing Club is wrong. I ask whether what these men are doing is not driving away all the Practicals from the land, and what will be the condition of England if another 40,000 of them are driven out of the country by their long shot firing?

I will say no more to this class of men in this letter, but turn to Lodes and Faults, or rather the earth's Veins and Arteries, and call attention to my diagram of faults, arteries, and coal beds, to show that portions of the earth rise and fall into each other, very



slowly, and imperceptable to man. Your readers will notice the pieces smallest on top, and marked *a*, *c*, *e*, *h*—all have risen. The pieces largest on the top, marked *B*, *D*, *F*, have all sunk. Notice Nos. 1, 2, 3, 4, 5, 6, 7, 8; all with the three lines is one and the same coal bed; those with the two lines a second coal bed. You will notice that the two-line coal bed at *a* is nearly out of the ground, at *c* it is up to the surface, and at *d* (the three-line coal) it is all but gone out at the bottom. This will disappear, and the piece will have only one bed in it. I have seen real sections, where the top coals were washed off the earth by the deluge. I have before shown a section of a coal mine at Durham, taken by Prof. Ansted, where two beds were all washed off. It is those pieces, that are continually rising and sinking, which have caused the Theorists to write of the sea level being up and down at different periods of time. This is not true: had they been practical men, and taken true sections of the rise and fall in the coal bed near the sea shore, and taken the different lines of the sea level as seen, and drawn all to scale, and then made, as I have done, a working slide model, and shifted all the coals to their place in one continuous line; they would have then found that all the sea lines would agree. I may notice that when these coals are shifted up and down they are generally about one-twentieth deficient. Now, here is a point for grave consideration. I ask, what has become of the missing coal? You see no waste coal about these faults, but it is plain that the No. 4 three-line coal has shortened very considerably, and will go off. Then how does it go off, and where does it go to, leaving no trace behind? I say it again, dissolved and moved off in atoms to join other coals, or to the surface of the earth to grow vegetables. This bears out my theory as to coals dissolving and growing in the sea without the aid of earth-grown vegetables, which are never required, further than what is carried into the sea from decomposition to re-form them. I must call attention to the piece *B*, *D*, *F*. These are all sinking pieces, with a hill on each. I ask the theoritical men to show me how it is possible for either of these hills to be thrown up from volcanic eruptions? I say, and no practical man can fairly contradict me, that this diagram is not founded on the true laws; and men with a shadow of intellect must see that it is quite impossible for any interior fire to throw up a hill like these without destroying all the faults and the coal beds they come into contact with, and all the east and west lodes or veins. It is ridiculous for the would-be scientific men to continue writing such nonsense as

...t forth at the Bath meeting. What a pity it is that there was not a sound man ...e chair, to have called them to order, and to tell those there assembled that the ...eeting was held to discuss points grounded on sound reasoning and good sense. Were ...ther of these hills thrown up by eruptive force, the working miners ought long ...e to have known what sort of place the interior of a volcanic mountain is, and found ...ains garnished with pillars of basalt, and hundreds of caverns. Will the supporters ...is theory show me one such discovery? I say that hitherto the miner has not ...covered one such, to enable these men to bear out their theory, neither will he ever ...n. This section is more fully shown in those I gave in March and April, 1862.

...Before I close this letter I may ask what there is in creation without arteries and ...ins? We see them in animals and vegetables; they grow and keep pace with what-...ver they are in. We see them in every rock, where they are of the largest type. Then ...ask, who can show me by sound reasoning that they were not formed when the earth ...was created, or that they did not keep pace with every rock that grew, as they do in ...everything else, or that the earth ever worked without them? I also further notice that ...two-thirds of the globe is covered with water, quite enough to submerge all the ...former inhabitants, with all their works. We must not expect to find their remains ...in the land we live on. Theoretical men tell us of the great pressure there is on the ...interior of the earth; from this I differ. I believe that centrifugal force takes it off ...its weight. Were it not for centripetal force acting against it, I think the earth would ...be absurd. They also say that rocks harden in depth; this, so far as I have seen, is ...the case; if anything, I believe they are softer. I have weighed pieces from deep ...mines, and found them not to become denser after the first 100 ft. below sea level. ...In my next I shall give a section of the Mining School's supposed earth's crust, and ...think, to my great surprise, is authenticated by nearly every theoretical writer.

N. Ennor.

MINERAL DEPOSITS IN CARMARTHENSHIRE.

Sir,—Naturally anticipating some reply to my letter on "the Taibach ..." in the Journal of Oct. 1, either from Capt. Waters or his would-be champion "H.," I was surprised to find, on perusing last week's Journal, that these self-esteemed geological mineralogists allowed silence to reign supreme; presuming, I suppose thereby, that course to be the better part of valour. But let me tell them, that however self-satisfied they may be in ...striking out of the controversy, the public have a right, and in such matters never ...to exercise a sound judgment, and that from more than one person have I heard ...their conduct is clear evidence of the "white feather," and conclusively establishes ...of two facts—either that neither are competent to combat the points propounded on ...and legitimate grounds; or that, aware of the hopelessness of endeavouring to sup-...their pseudo assertions, they consider the most easy course to adopt is to treat the ...matter with apparent perfect indifference, but whether with any relish to their sensitive ...appetites they are the best judges. But of this much they may rest assured, ...that the public can now fully appreciate the motives of Capt. Waters's ludicrously as-...sumed "unprejudiced interference;" and whether, after at least one honourable captain's ...open challenge, in last week's Journal, defying contradiction of his opinion of the sett ...in question being one of the best pieces of mining property in South Wales, the inn-...uendo letters which have appeared in the Journal upon the subject, not one of which ...have been confuted, and the well-known and admitted fact that Capt. Waters is connected ...with the Vale of Towy Mines, *only just across the water.*

That this controversy has not been evoked by the meddling of an interested busybody, ...inventions of all truth, for the purpose, if possible, of deteriorating all mines in Carmar-...then, but those with which he is personally connected, and in which he is person-...ally interested, and thereby preventing their *debut* in the mineral world antagonistically ...to his own, I leave to the candid judgment of others, my own opinion being too well ...founded to be in the least degree shaken by anything Capt. Waters or his friend "H." ...may have the temerity to say; it appearing patent to my mind that truth is the least at-...tractive feature in their composition. And after the refutation in last week's Journal, ...asserted by the attacked "local contributers," which completely set at naught "H.'s" ...so called-for and unjust remarks, I can only hope some spirited company will think ...the working of the Taibach sett a fitting object for speculative enterprise, by at once ...proceeding to the full development of its resources, which there can be no doubt will be ...equally as lucrative, if not more so, than the Vale of Towy Mines, wherein Capt. Waters ...is interested.—*Oct.* 12.

Observer.

CARMARTHEN MINERAL DEPOSITS—TAIBACH MINE.

Sir,—The controversy on this mine should be brought to a simple is-...ue; and, as I understand it, the questions in dispute are—1. Is Taibach ...outside the metalliferous range of rocks in South Wales?—2. Are the ...rocks at Taibach clay-slate or shale? These are the questions respecting ...which Mr. Edward H. Dingle challenges "those parties who have written ...in the Journal on them to meet him fairly in the field" for discussion. ...Now, Sir, with your permission, I accept the challenge, and "the field" ...shall be your columns.

1. Is Taibach outside the metalliferous rocks of South Wales? Before ...entering into this subject, I must frankly confess that at one time I was convinced ...there was no such thing as a clearly-defined zone of metal-bearing rocks in the country, ...taking the strike of the beds, as laid down in the horizontal sections of the Geological ...Survey, I imagined it was wrong to set up an arbitrary limit to the productive power ...of those rocks. For instance, assuming that the strata which bear lead in Cardiganshire ...found through Carmarthenshire, I argued that there was no reason why, all things ...being the same, rocks that are mineralogically and geologically identical in the two couns-...ies should not be equally productive in both. I was, too, influenced by other reasons, ...which I will not now trouble you with. It is sufficient for my purpose at present to ...state the views I entertained when I wrote to you, three or four weeks ago, in order to ...account for the change which has since taken place in them. Holding, as I do, a very ...high opinion of Capt. Waters, I could not reject his statement, that Taibach is "out of ...the metalliferous range," without investigating the matter afresh; and I find that in ...South Wales one particular district is, by common consent, termed "The South Wales ...Mining District," and the rocks in that district are called "the metal-bearing rocks of ...South Wales." In the "Memoirs of the Geological Survey of Great Britain" this dis-...trict is accurately described. "It is a tract of land," says Mr. Warington Smyth, "ranging ...about 40 miles in a north-north-east and south-south-west direction, varying from 5 to 22 ...miles in length. . . . . It will be seen that a belt of land (forming the 'Aberyst-...with group' of Prof. Sedgwick), stretching along the sea coast, and occupying a width ...of four miles on the north of Aberystwith, and 12 miles near Aberaeron, is, as far as is ...at present known, destitute of mineral veins; and the same may be said of the high range of ...mountains on the east and north of Tregaron, of the principal group of Plynlimon Fawr, ...and the hilly east of Llanidloes, and of the elevated plateau between that town and Llwyn-...dyrnair."—("Memoirs of the Geological Survey," vol. 2, part ii., pp. 655–6.) This district, which has been separated into six parallel zones, constitutes the metalliferous ...range of rocks in South Wales. In the mining world this arrangement has been fol-...lowed, as I shall prove by reference to the Journal. Some two or three years ago your ...late correspondent commenced a series of articles on "Mining in Wales," in which he ...disguised this classification, and the mines outside the metalliferous range I have di-...rectly referred to he placed under the heading "Scattered Mines." There can be no ...doubt that this classification, or one closely resembling it, is always observed, and was ...first suggested for the first time by Capt. Waters, or by "J. A. T.," or by "H." Besides ...being perfectly natural, and if the Geological Survey had not adopted it, Captain Waters ...might have done so with consistency and truthfulness. I do not see how he could, as ...an honest man, have kept back the truth. In effect he said, "I have not inspected Tai-...bach, but judging from the specimens I have seen, and the fact that it is beyond the me-...talliferous range of rocks in South Wales, I have no faith in the undertaking." That ...was precisely what an honest and intelligent mine agent was bound to say, and yet for ...thus speaking the truth Capt. Waters has been roughly and libellously abused by your ...correspondents. I may as well add that I go something further than the Geological ...Survey, and, without any fear of contradiction, I assert that there is no other part of ...South Wales to which the term "metalliferous range" can be applied. Taking Taibach as ...a central point, I do not find a single mine profitably worked within 20 miles, if I ex-...cept the Vale of Towy, in the Lower Llandilo rocks, and differing in many respects from ...any other mine in the country. I would ask, then, can a solitary, an isolated mine, ...having no ore, within a radius of 20 miles, be considered in a metalliferous range of ...rocks? Why, the thing is monstrously absurd. And, more even than that, every trial, ...that there have been many, in the country I have named have ended disastrously, with ...the abandonment of the works. As I write I am credibly informed that the Llwyn-...dunig Mine, adjoining Taibach, has just been stopped, the men having been paid off ...last week, by Messrs. Knight and Manders, the lessees. I am, too, assured that the lode ...in Taibach, which has been driven on, and to which Mr. Dingle refers in his report as ...within 4 fathoms of the lode, is actually about 10 fathoms beyond the lode. I do not ...vouch for the correctness of this statement, which has, however, come to me from a per-...son who a few days ago dialled it.

2. Are the rocks at Taibach clay-slate or shale? I am very glad to be able to call up ...as soon a "disinterested" witness, whose testimony alone I might satisfy myself with ...in this controversy, for my witness is no other than Mr. Edward H. Dingle himself. As ...my opponent, his evidence should have great weight. The Taibach lodes, he says, "are ...imbedded in soft clay-slate, and not shale or sandstone." *Soft* clay-slate, indeed! Now, ...supposing there could be such a thing as *soft clay-slate*, what other conclusion could be ...drawn than that the lodes "imbedded in it" are barren and worthless? For, accept-...ing the theory of Prof. Ramsay, that the Silurian districts of South Wales are constituted ...by a succession of rolls or undulations, of what may, in the main, be termed the same ...series of beds, and that Taibach is parallel to the axis of undulation in the productive ...rocks of the metalliferous range, the soft rocks do not carry ore. "When the lode," says ...Mr. Warington Smyth, "passes from a hard, solid rock, into a softer rock, or into shale, ...not a vestige of ore remains to tempt the miner onwards."—("Memoirs of the Geological ...Survey of Great Britain," vol. 2, part ii, page 667).

There is, then, absolutely nothing in the "beautiful soft clay-slate" at Taibach. But ...after all, what is clay-slate, and what is shale? Chemically there is no appreciable ...difference, for both of them contain, by analysis, from 50 to 60 per cent. of silica, and ...from 15 to 20 per cent. of alumina, with varying proportions of iron, lime, potash, &c. ...I have before me the analyses of a great many specimens from different parts of the ...country, but at present I will not trouble you with details. Lithologically, shale is ...described as a "regular laminated clay rock, more or less indurated, and splitting into ...thin layers along the original lamina, or planes of deposition;" and clay-slate as "a ...metamorphic clay rock, differing from shale in having a superinduced tendency to split ...into thin plates, which may or may not be coincident with the original lamination" ...(Orton's "Manual of Geology," p. 122). In fact, the difference between the two rocks is ...not in composition but in hardness and cleavage. What, then, becomes of Mr. Dingle's ..."beautiful soft clay-slate?" I fear, Sir, that Mr. Dingle does not know what clay-slate ...really is. But I will not rest my case here. Not very long since I was in the railway ...cutting near Llanpumpsaint, which presents a fine section of the same series of rocks as ...at Taibach, and through which it is asserted the Taibach lode runs. I examined these ...rocks carefully, and I have no hesitation in saying that they are shale. They are, as ...Mr. Dingle says, "beautiful and soft," splitting into small thin layers, coincident with ...the lamina, and commonly known in the country as rab or rubble, and geologically and ...mineralogically as shale. There is no doubt about it whatever. Again, in the Geolo-...gical Map of the country, as disinterested a witness as Mr. Dingle himself, the whole ...series of strata in the Silurian districts of South Wales are assumed to be shale, except ...where it is distinctly stated to be the contrary. Now, I find in several places the words ..."argillaceous slates," "argillo-arenaceous rocks," and "sandstone," but for miles around ...Llanpumpsaint there is a dreary blank, confirming the statement of Capt. Waters, of ..."J. A. T.," and of "H.," that the whole district is shale—nothing but shale.

I stop here for the present, believing that I have established the propositions I under-...took to prove. I wait to hear what Capt. Dingle and the proprietor of Taibach (a very disinterested advocate) have to say in reply. I cannot, however, conclude without re-...ferring to the declaration signed by ten famous shareholders in the Taibach Mine, that ...they are perfectly satisfied with the results, taking into account the improved indications ...of the mine, and the specimens sent to your office. I am not a little surprised to find ...the signature of some of these shareholders to this precious document, after what they ...have in private, not a fortnight ago, said about the speculation at Taibach. Of course I cannot repeat here what I refer to. But I assert that the mine is shut up for want of capital to work it, and that there is no chance of forming a local company. The proprietor knows that well, and he also knows that if the results had been something more than "improved indications, and the specimens sent to your office," there would have been no difficulty in getting up a company. It is the want of that perfect satisfaction, which the ten doughty shareholders profess to enjoy, that has forced the proprietor into the London market. He does not care where the money comes from to work the mine, and if he could get it at Carmarthen—if these ten deluded shareholders, who are delighted with the prospect of dividends from an adit "emptying its water into the very brook," would only contribute a mere bagatelle, say 10*l.* or 20*l.* each—the work would at once be resumed. But they are not such fools. Theirs is the satisfaction, the perfect satisfaction, of men who know their loss. Like the burnt child, they have the satisfaction of knowing that they will, in no case, go near the fire again. One of your correspondents, in the presence of these ten enterprising and satisfied shareholders' ventures to assert that the Welsh are not speculative. How dare he insult these shareholders, who, at the risk of a couple of hundred pounds, let the water out of a bank at Taibach, because the proprietor "has an idea" that his land contains "a certain proportion of silver, if not traces of gold." So had the alchymists of old an idea of traces of gold; but that idea was a delusion, which turned their brains.

Seriously, Sir, I must repel the accusation that the Welsh are not speculative, and when your correspondent asks who carries out the great manufactories of Wales, or who makes our railways, I reply that Welshmen have a large share in these undertakings. Look at our docks in Cardiff, in Swansea, and in Llanelly. They owe their existence for the most part to Welshmen. Look at our large ironworks and collieries. Many of them are in the hands of Welshmen. Look at our railways. They have been nearly all made by Welshmen. I cannot go into particulars, but as your correspondent lays great stress upon railways, let me remind him that Mr. Talbot, the late Chairman of the South Wales Railway Company, is a Welshmen, as were also several of the most active directors, such as Mr. Lewis, of Regent-street, London, and Mr. Lewis, of Stradey, Carmanthenshire. Take, again, the railways in the North. Most of these were made by Mr. David Davies, an eminent Welsh contractor, who is now engaged in large railway works throughout Wales, with his partner, Mr. Roberts. All this outcry, Sir, about the lack of enterprise in Wales is bosh. London is the money market of the world, and there all the capital comes from to make English as well as Welsh railways. Directors or contractors are merely the instruments through which this capital is obtained. However, I will not discuss with Mr. Dingle, or your other correspondent, anything beyond the simple issue involved in the two propositions with which I started. H.

THE COPPER MINES, AND THE SMELTERS.

Sir,—I observe an article in the Supplement to the Journal of Oct. 1 respecting the coal and iron raised in this country, and stating that this mass, which adds millions yearly to the wealth of the country, is raised at a loss to those whose capital and enterprise produce such results. The same remarks are applicable also to our copper mines. The copper mine proprietors, with very few exceptions, are at the present time working their mines for the benefit of the smelter, and it is time they should ask themselves the cause of these ruinous low prices, and if there be not a remedy? I answer, and say it is their own faults, and it serves them right. They are exhausting their mines by raising all the ore they can, not to benefit themselves (for, in my opinion, hundreds of tons are raised at a loss with the present and past low standard), but the smelter; for the smelter will not give the miner a remunerative price for his ore, and this in the teeth of diminished returns. Look at the ticketing farce, where four smelters out of fourteen have been known to buy a small parcel of ore. Is it probable, if the price had not been beforehand agreed on, that four buyers could all have offered the same amount per ton? And so the miner goes on month after month, between hope and despair, until the smelter, in a fit of generosity, suddenly puts up the standard, like throwing a bone to a famished dog. This puts new life into the miner; old pitches are put to work, fresh stopes are let again, but, before the ore from these places can be sold, the standard is as low as ever. The working expenses of mines have increased lately by miners and tradesmen's wages going up, whilst the price given for copper ore has decreased.

It is well known there is a very great decrease of copper ore in the two counties, and smelters do not know what to do for the want of it; and my advice is, make it still scarcer for them. Let every mine reduce its returns one-half, and we should soon see a remunerative price given to the miner for his ore. Why should the smelters demand 21 cwts. of ore for a ton? Do they sell 21 cwts. of copper to their customers for a ton? There is also another charge which the mines ought not to be saddled with, and that is smelters agents' fees for sampling and weighing the ore they purchase. I think, in common justice to the mines, the smelters should pay their own agents. The mine proprietor does not ask the smelter to pay his agent, then why should the smelter look for the mine proprietor to pay his? Every branch of commerce has its periodical meetings, where the price for a certain period is regulated, be it iron, copper, cotton, &c., but the miner, good easy soul, leaves it to the smelter to regulate the price of his goods, something like the fox taking care of the geese.

Mine Adventurer.

Cornwall, Oct. 12.

MINING,—AS COMPARED WITH OTHER INVESTMENTS.

Sir,—At such a monetary crisis as exists at the present time, when every kind of speculation and investment is unfavourably influenced, many of them even feeling its effect to such an extent as to seriously injure their real value, it must be most satisfactory to everyone interested in mining property to observe how well judicious investments of this sort have stood the brunt of the general wide-spread depression during the last trying three months, in comparison with other commercial undertakings, generally regarded by the public with more favour and less distrust than Mining; indeed, it must be the more reassuring to the mining interest at large to notice the comparatively steady state of the market, when nearly every other species of stock have experienced a gradual, and in many instances heavy, fall. Although there are, doubtless, many causes at present sufficient in themselves to check the spirit of speculation, which is generally observable towards the close of the year, yet the existing tightness in the Money Market will in itself prove of immense advantage in restoring before long a healthy tone to all legitimate enterprise, and purging away many a bubble scheme, which hitherto has existed by fictitious means, but must now die out from natural causes. The suspension of the Leeds Bank, together with the recent heavy failures of many respectable mercantile houses, and other similar causes, have doubtless contributed to disseminate amongst the public a feeling of caution and distrust in most undertakings; for the community at large, like individuals, are speedily influenced by circumstances of this kind; yet an unbiassed review of the mining market shows an extraordinary and favourable contrast to the generality of most other securities—indeed, many of the principal dividend and progressive mines have been sought for, at the highest market value, as a safe and profitable investment.

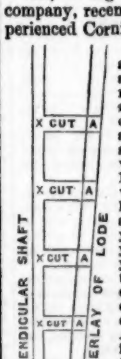
Some few mines, it is true, have felt the effects of the universal depression of the time, but in most the drop in their value has not been to any extent, and is but temporary; and a very large number of shares have, consequently, been bought in by sharedealers, in anticipation of the reaction which must soon take place. It always happens that at a time similar to the present there are many holders of really good and safe shares who are unable to hold on their interest until "a reaction" sets in; thus the market becomes further burdened, and the prices fall accordingly. Judicious purchases, made in a depressed market, are safer speculations than when any particular mine is having "a run;" but the public, unfortunately, do not see it to be so, consequently, they frequently buy at high premiums, and are discontented at the limit to which shares advance, forgetting that mining, above most other transactions, is greatly influenced by public excitement. At present there are some mines which, although they have maintained their price remarkably well, are far below their real value, and in these an immense rise may soon take place. Amongst them may be mentioned the Chivertons, East Russell, Grenville, with upwards of 20,000*l.* reserves, now working at a profit, and will probably enter the Dividend List this year. East Lovell, Great Wheal Vor (cutting very rich), Cook's Kitchen, North Crofty, Tincroft, &c. The latter is much below its real value, and too well known to need further comment. Many others might be named as first-class speculations, and the public will soon estimate their real value, when the coming reaction will probably, in comparison, far exceed the present depression.

* * * * *

GREAT NORTHERN COPPER MINING COMPANY.

Sir,—I beg to request the insertion of a copy of a letter relating to this company, recently received from Adelaide, the writer of which is an experienced Cornish miner.

A Shareholder.



"I have thought for some time past about dropping you a word or two about your Nuccaleena Mine. I hear very frequently that you are about to close up that mine; but I think you are just where you should renew your efforts, and properly prove the lode; the great error is the *manner* in which you are attempting to prove the lode. You have a downright shaft standing only a few fathoms from the lode, and at the angle of the underlie, it will be a long time before this shaft will intersect the lode. Were your shaft sunk *on* the lode, you would prove its value every fathom you should sink; but now you have to sink your 10 or 15 fms., or as the case may be, all in uncertainty and doubt; and when you *do* cut the lode by your cross-cut, you see it about 3½ ft. in length and 6½ in height, so that, instead of proving 10 fms. in depth and 10 feet in length, and that in half the time and for half the money, you merely see a point thus:—*A*, shows the small portion of the lode you discover in the way in which you are now working. As a rule, you may calculate on 75 per cent. to sink a shaft off the lode and in the surrounding strata over the cost of sinking on the lode, besides the cost of driving cross-cuts, and the subsequent trouble and cost to discharge ore and refuse. The history of nearly all of our good mines, not only in Cornwall and other parts of England, but in Cuba and South America, goes to show that dead and worthless patches of ground almost invariably stand between the surface and the deep deposits of ore, and those who have persevered and dug through this worthless rock have been well paid for their outlay. I think you have an excellent field for speculation in the mine referred to, and I should feel sadly dispapointed to see it abandoned without further trial. I believe you will be remunerated in the end. It was a saying of one of the wisest of our Cornish mine speculators—'*Let those who will sink shafts and erect costly machinery, and I will take them when they are tired.*' Had I the means I would take shares in Nuccaleena, with the understanding that the lode be tried in *depth*."

TRUE PROPHETS—"DEVON COPPER MINE."

Sir,—How pleasant it is to find one's self a true prophet, as it occasionally happens to miners, as well as to your weather correspondent? There is, however, one advantage possessed by miners over our friend with the "weather eye," and it is this—If a certain change of weather foretold arrives sooner than was expected, it upsets his coach entirely; whereas, if great things foretold of some "coming mine" arrive sooner than they were expected, no one grumbles; indeed, "the sooner the better," and much additional lustre thereby attaches to the prophecy. Now, Sir, I have for some time, as many of your readers are aware, pointed with some boldness to a certain "coming mine," in what I also consider a "coming district"—the Okehampton district. "Devon Copper Mine" is now not unknown by name and reputation; for, as "good wine needs no bush," so a good mine will irresistably find its way into public estimation. Recent discoveries there (which, though considered inevitable, were not expected quite so soon) embolden me to repeat with increased confidence that the very unusual and demonstrative indications are not to prove delusive, and, moreover, that it seems as though the fortunate adventurers were about very speedily to present to the world one more to add to the three or four really great and startling discoveries hitherto made in this country. All who have watched the mine, and especially some of the most experienced British miners who have lately seen it, concur in this strong opinion; and, indeed, a glance at the unusually large and strong lodes, and at what is coming up from only 10 to 15 fms. in depth, is sufficient to show that the opinion is based on the soundest foundation. There is now something more substantial than indications to cheer the hearts of the adventurers, inasmuch as the adit level is producing a considerable quantity of copper ore of various kinds, and of high average quality, several tons of which are already at surface, though the men have only just begun to take it down. This is only from 10 to 15 fms. in depth, and the fact that the lode is showing quantities of what miners call "greens" is looked upon as additional evidence that a much more important deposit of copper exists near at hand. The mines lying in a new district (as yet little understood), this valuable discovery is steadily developing, little heeded except by a few; but I assert that if the mine progresses as it has done for a few weeks past, in a very few weeks more it may make more "noise in the world" than has been made by any discovery since the oft-quoted, misused, and much-envied "Wheal Maria." The event will, probably, be the signal for a rush to the district, which promises large and early profits, easily obtainable. Eastward, Ho!

Meetings of Mining Companies.

WEST CARADON MINING COMPANY.

A quarterly meeting of shareholders was held at the offices of the company, Broad-street-buildings, on Wednesday,

Mr. R. Hallett in the chair.

Mr. Dunsford (the secretary) read the notice convening the meeting, and the minutes of the last were approved. A statement of accounts for the two months, ending with costs for June, was submitted, as follows:—

Mine cost	£2010	0	6		
Merchants' bills	720	2	10		
Dues	119	15	1		
Interest account	71	8	3		
Incidental expenses	0	16	10	= £2922	3 6
Copper ore sold				1939	17 3
Leaving balance (loss)				£ 982	6 3

The balance in favour of the mine was 1811*l.* 3s. 2d.

The Chairman proposed that the two months' accounts, as submitted, should be passed and allowed.——Mr. Schofield enquired what costs had been paid since those debited in the balance-sheet now before the meeting?— The Secretary said that July and August costs had been paid, and there was another sale of ore to come against the next two months' costs.

A Shareholder enquired what amount was realised by the last sale of ore?—The Secretary: 1677*l.* 17s. 3d.——Mr. Schofield wished to know the reason why the whole of the costs that had been paid was not brought up, and also the sales of ore?—The Secretary said it could be done if it were the wish of the meeting.

Mr. Schofield, referring to the recent special report upon the mine by Capt. Charles Thomas, said that the most important point of operation—the bottom of the mine—had not been seen by Capt. Charles Thomas, and yet his report, which told the shareholders nothing that they did not know before, had caused the shares to decline in value some 3*l.* or 4*l.* per share.——A Shareholder had understood that Capt. Charles Thomas was underground for only two or three hours.

The Secretary (in reply to a remark) stated that when at the last meeting it was decided to have the mine inspected by a special agent, considerable discussion ensued as to the fittest person to be engaged, and Capt. Charles Thomas was eventually decided upon.——Mr. Schofield was of opinion that, as far as regards the old mine, the object of the agent should be to cut the whole of the lodes as quickly as possible.

Mr. Bradley enquired the amount that would be saved by suspending the further development in depth of the western mine?—The Secretary considered that it would effect a saving of something like 180*l.* per month.——Mr. Schofield, although admitting the expediency of such a step, did not think the depth to which that part of the mine had yet been developed could be regarded as a fair trial in a mineral district like that, wherein were situated such mines as South and East Caradon.

The Chairman mentioned that Capt. Dunstan told him some years ago that they would never find anything of importance in the western ground; but Mr. Pryor subsequently discovered a rich bunch of ore there, which produced very large returns.

The Secretary, in reply to a question, stated that the loss upon the operations during July and August was 714*l.*, so that at the end of the latter month there was a credit balance of about 1100*l.*——A Shareholder enquired the estimated monthly loss in the event of sinking at the western ground being suspended?—The Secretary said that Capt. Brown, who inspected the deep part of the mine for Capt. Charles Thomas, was present, and he, no doubt, would reply to the question as to the estimated monthly loss after the development of the deep part of the western ground had been suspended.

Capt. Brown said he estimated the loss would not be less than 300*l.* or 350*l.* per month.

The Secretary presumed that Capt. Brown in that estimate calculated upon the continuing of the tribute pitches and the sinking of the shaft.——Capt. Brown said he had reckoned for the carrying on of the same amount of tribute as at present (except at Pryor's), and for the sinking of the shaft.

Mr. Schofield wished to know if there was any reasonable ground for believing that the ends in the deeper levels would come into profitable ground?——Capt. Brown considered there was. At the bottom of the 165, on Menadue, the lode had gone down, but the winze in the bottom of the 155 was as deep as the 175—in fact, the winze was 10 fms. below the sump-shaft.

Mr. Schofield asked Captain Brown if he considered the mine had been properly worked—that is, had the bottom levels been sufficiently extended?—Capt. Brown said since his last inspection the shaft had been sunk 10 fms., cross-cuts had been driven, the lode cut, and the 155 driven. The cross-cut was extended some 60 fms. before the lode was reached, and 40 fms. further before it came into ore.

Mr. Schofield said it was impossible to make a mine permanently remunerative without sinking the shaft and driving the deeper levels. He recollected attending a meeting of this company some years ago, when he urged the necessity of adopting that course, and had it been done, their property would, in all probability, never have been in its present position.——Capt. Brown said that, as far as cross-cuts were concerned, he did not know another mine in which an equal number had been put out.——The Secretary said that required explanation. When those cross-cuts were put out, it was thought their great chances of success were in the virgin ground between the old mine and the Caradon Consols boundary. At that time there were splendid courses of ore running into that ground, and the universal opinion was that they were going to open a new mine, and one that would prove highly profitable. They sank two shafts—Hallett's and Pryor's; from the former there was returned a large quantity of ore, but the latter failed, which was their great misfortune. He made these remarks in fairness to the agents—that there were two shafts sinking, and cross-cuts were being put out wherever there was the slightest probability of meeting with ore; so that this mine had always borne a large tutwork cost. Their misfortune was, that where they had hoped for a great success they had met with signal failure—that is, at the western part of the mine. It was the opinion of their agent, Capt. Johns, who was a most experienced and careful man, that this part of the mine had been proved.

Capt. Brown, in reply to a question, stated that he considered the strata congenial for copper ore.——The Secretary thought that the discussion was somewhat premature, seeing that the agents' report had not yet been read. As that report specially referred to the western part of the mine, he thought before that point was further discussed it should be read. The report was as follows:—

Oct. 10.—We beg to hand you the following report of this mine, which contains the work being carried out, as well as the objects we have in view:—Elliott's engine-shaft will shortly be down 10 fathoms below the 155; this shaft would have been completed ere this had not the ground been so hard, we are, however, pushing it down as fast as possible, and you may rest assured that every effort on our part will be used to get it completed to the 175. The winze sinking on the cross-course referred to in our former report below the 155, is down to the 175, and the drivage commenced towards the shaft, but in consequence of cutting an increase of water quite unexpectedly, and being too powerful to keep by manual labour, we have been compelled to suspend this point of operation until it has been partially drained by the shaft. In the 155 west, on Allen's, or Menadue lode, we have been breaking occasional stones of ore; our principal object here is to reach the cross-course, and then we shall be in a position to cross-cut to intersect Downing's and other lodes. We shall also continue this level to accomplish the object which we fully entered into in our report for the last general meeting. The 104 west, on Jope's lode, is now extended about 17 fathoms through tribute ground; we have tributers working in this piece of ground, and our opinion is that the greater part of it will be taken away up to the 90. Since we resumed the driving of the 92, on Vivian's south lode, we are pleased to inform you that it has considerably improved, and has been worth fully 3 tons of ore per fathom for the ground driven through; the present end is of the same value. The 90, or midway level, on the new lode, west of the rise, has been worth for the whole distance driven from 10*l.* to 12*l.* per fathom. The same level east is in the cross-course, and when cut through we shall drive south to cut the other part of the lode, and seeing what we had in the level above, we have every reason to expect to meet with profitable ground. The 60 west, on Vivian's south lode, is producing stones of ore; the same level east is unproductive. In the 50, west of Hallett's shaft, on Menadue lode, a better channel of ground is making its appearance; judging, however, from the run of the ore ground in the level above, we have about 10 fathoms more to drive to get under it. The winze sinking below the 27, on the south part of Menadue lode, although not rich for ore, has a very kindly appearance. We are still pushing on with all possible energy the 92 cross-cut, south of Allen's; the 38, south of Hallett's; and the 38, for cutting the south part of Menadue lode. These are, as you are aware, important points to be proved, and our opinion as to the results is without alteration. Seeing that the 104, on Jope's lode, has so far open up tribute ground, and that nothing has been done below this level, has induced us to clear the 128, from Fox's shaft, in the cross-course. This level, so far as seen, has run together, and would have been cleared ere this, but we have been waiting to see the result of the 104, just referred to; we are now decidedly of opinion that the chances are great, as this is in the run of the shoot of ore ground where immense quantities of ore have been raised, and is, in addition, in whole or unexplored ground, through the entire length of the sett below the 80 fm. level. We are almost satisfied that the lode is cut through in the bottom of Pryor's shaft, and I still entertain the same opinion as before expressed—even before the inspectors were called in—that it would be advisable to suspend operations in this part of the mine, and then put a dam in the 17 to keep back the water from flowing into the eastern part of our present workings, believing that this will be found to have the desired effect: you must, however, distinctly understand that this piece of ground will not entirely be shut up, as we shall have the 92 fm. level cross-cut coming in at a deeper level than the present bottom of Pryor's, and if the lodes are found productive will, of course, prove this part of our sett. Our ore sold on the 29th ult. has realised, with carriage, 1667*l.* 17s. 3d. You will see from this report that our prospects are more cheering, and we believe that no better plan can be adopted than the present mode of working for the development of the mine.—William Johns, Richard Trathen.

The Secretary said he fully agreed in the policy of suspending the operations at the deeper portions of the western ground, for if any favourable alteration took place it would be discovered by the cross-cut that would be continued in the 92, at Pryor's shaft.——Capt. Brown did not think the shareholders could do better than to adopt the suggestions of Capt. Johns.——Mr. Boyle enquired of Capt. Brown how long he estimated it would take to sink the shaft the other 10 fms.?—Capt. Brown said that he considered it would take about twelve months.

A Shareholder enquired the opinion of the committee as to the future of the mine?

—The Chairman said the committee were of opinion that the mine should be prosecuted with spirit, and the more especially as there were so many important points to come off. Those who practically understood mining did not feel in any way apprehensive as to the results, although there might be some few months' delay. West Caradon had been in a much worse position than it was at the present time; and as great discoveries had been made, it was by no means improbable that by continuing the present explorations further riches would be opened up, and profits divided among the shareholders. (Hear, hear.)——Mr. Schofield asked if the heavy cost was incurred by the driving of the ends or in the raising the ore?—The Secretary said that the ore was raised at high tributes, but at the same time it would be very unwise to stop any of the tributers, because at any moment they might make an important discovery. Shareholders must recollect that the greatest discoveries in Cornwall had been made by tributers.

The report was then ordered to be entered upon the minutes, it being agreed to adopt the recommendations therein contained. The accounts for the two months (June and July) were passed and allowed.——The Secretary enquired of Capt. Brown which of the lodes the engine-shaft would first intersect?——Capt. Brown: The two south lodes.

The Secretary, replying to a question, stated that the next would be a two-monthly meeting, at which four months' costs would be brought up.——Mr. Schofield said it appeared, from all he had been able to collect, there were very favourable prospects of making some good discoveries.—The proceedings concluded with the usual courtesies.

GREAT WHEAL GRYLLS MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, Broad-street-buildings, on Wednesday,—Mr. P. Watson in the chair.

Mr. Dunsford (the secretary) read the notice convening the meeting, and the minutes of the last were approved. A statement of accounts, ending with cost for August, showed—

Balance last audit	£1061	7	3			
Tinstuff sold	59	6	6=	£1120	13	9
Mine cost	£ 340	5	5			
Merchants' bills	412	2	7=	752	8	0
Leaving credit balance	£ 368	5	9			

The report of the agents was read, as follows:—

Oct. 10.—We beg to hand you our report of the work done during the last three months. —Michell's Lode: Mitchell's flat-rod shaft has been enlarged from surface to the deep adit, cased, divided, and footway fixed complete to this depth. The shaftmen are now engaged cutting plat at this level preparatory to sinking the shaft below adit. The adit level is driven west 11 fms. 2 ft. 6 in.; the lode for this distance will be taken away by tributers at about 12*s.* in 1*l.*; the end at the present time is worth 3*l.* per fm., and driving by three men, at 1*l.* 10*s.* per fm.—Stevens's Lode: The 27 from surface has been driven west 3 fms. through a lode worth 4*l.* per fm. In the back of this level there is a long piece of ground, which will be taken away at a profit when we get a stamps on the mine. At the 15 there is driven west 19 fms., a certain part of which will be taken away at a profit. Laity's shaft is sunk 14 fms., and properly timbered to this depth, but is suspended for the present time by reason of being down to water. At surface we have disengaged the old balance-bob, removed the building stone, built another bob-pit in its required position, and excavated about 200 fms. of ground for flat-rods; the greatest part of the frames, stands, rods, &c., are made, and in readiness for fixing. During the last quarter we have sold 1085 bushels of tinstone, which realised 73*l.* 6*s.* 3*d.* In conclusion, we would remark that we expect to get the rods in order, and put to work in five weeks from this time, which will be as soon as required for sinking the shaft.—Edward Rogers, James Pope.

The Chairman said all the preliminary arrangements had been satisfactorily completed, and there could be no question that, when they began to develope the ground below the adit level—where several lodes formed a junction—a rich deposit of ore would be found. The former workers did not possess the necessary power to take them below the adit level at this part of the mine, but the operations of the present company were being confined principally to that part of the sett, where unusually favourable prospects were presented.

Mr. Bradley wished to know the amount of the present monthly expenditure?—The Purser replied that the present cost was about 150*l.*; the merchants' bills had lately been heavy, in consequence of the materials necessary for the putting up of the flat-rods. ——The Chairman said that, although Great Grylls was an old mine, the present company's operations were confined to the new ground.——The Purser remarked that, at the present time there was a large quantity of tinstuff upon the floors.

The accounts were passed and allowed, and the report was ordered to be entered on the minutes. A vote of thanks to the Chairman terminated the proceedings.

WHEAL GRYLLS MINING COMPANY.

A general meeting of proprietors was held at the offices of the company, Broad-street-buildings, on Wednesday,—Mr. P. Watson in the chair.

Mr. Dunsford (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed. A statement of accounts was submitted, which showed—

Call	£1536	0	0			
Black tin sold	1984	15	11=	£3520	15	11
Mine cost	£1786	0	2			
Merchants' bills	902	17	7			
Dues	107	0	0			
Interest	67	4	6=	2863	2	3
Leaving credit balance	£ 657	13	8			

The debit balance was 895*l.* 9*s.* 9*d.*

The report of the agents was read, as follows:—

Oct. 10.—We beg to hand you our report of the present prospects, and work done during the last three months. Fisher's Lode: The 40 has been driven east of Annie's engine-shaft 11 fms. The lode in the present end is worth 9*l.* per fm., and is driving at 3*l.* per fathom. In the back of this level we have risen 5 fathoms, and communicated to a winze sunk from the bottom of the level above. All this ground passed through will be taken away at a profit. We have also at this level cut a platt and laid down a railroad for conveying the stuff to the shaft. The 30, east of Grylls, has been extended 15 fms. This end is driving at 2*l.* 15*s.* per fm., and the lode is worth 10*l.* per fm.; there has likewise been a communication made from this level to the level above, and another rise just commenced and up 9 feet, the lode in which is worth 10*l.* per fathom; price for rising, 3*l.* per fm. The ground opened in this part of the mine will be taken away at a low tribute. This end is nearly under the Pressure shaft—a piece of ground lately added to the sett, where large returns have been made in the upper levels. The 20 has been driven east 2 fms., but suspended, by reason of being hard, the lode poor, and so near the ancients' workings; our intention is, therefore, to communicate to the Pressure shaft by a rise in the back of the 30, which, from the present appearance, will open a rich profitable piece of ground. The 10 is driven west of Jones's shaft 7 fms.; the back of this level is working on tribute, at 10*s.* in 1*l.*; the lode in the end is worth 1*l.* per fathom, which is about the price for driving. The adit level is driven west of this shaft 5 fms., the back of which is working by tributers, at 12*s.* in 1*l.*; the lode in the end is small and unproductive. This level has also been driven east of western shaft 4 fathoms; the lode has produced a little tin, but not enough to set a value on.—Standard Lode: The western shaft is sunk 3½ fms. below the deep adit, and is sinking at 3*l.* 10*s.* per fm.; the lode is worth 6*l.* per fm. In the bottom of the adit there is a winze sunk 5½ fms., through a lode worth 12*l.* per fathom; this ground is now set to tributers, at 8*s.* in1*l.* Badger's shaft is sunk 12 fms. from surface, and a level driven east at this level 4 fms. The lode in this sinking and driving has produced tinstone that will just pay for stamping.—Georgia Lode: The 30 has been driven north 3 fms., and a winze sunk in the bottom of the level 6 feet. The lode in this driving and sinking was 2 feet wide, and produced work that would just pay for stamping. Operations on this lode (under adit) have been suspended during the last two months, and in order to fully develope this lode below the 30 there must be an outlay to do so. Our tribute setting for October is as follows:—Seven men, at 7*s.* 6*d.* in 1*l.*; four men, at 8*s.*; ten men, at 10*s.*; four men, at 11*s.*; twelve men, at 12*s.*; and three men, at 13*s.* 4*d.* in 1*l.*; the tributers paying all expenses. There are employed in and on the mines 195 persons. We have cleared and sold 34 tons 13 cwts. 2 qrs. 25 lbs. of black tin, amounting to 1984*l.* 15*s.* 11*d.* In conclusion, we would remark that our prospects are a little better than they were at the last meeting; and although the price of tin is so low, we have no doubt but that we shall be enabled to make the returns pay the cost of the mine.—E. Rogers, J. Pope.

The Chairman having proposed that the accounts should be passed and allowed, and the report received and entered on the minutes, stated that, at the last meeting there was a balance against the company of more than 1500*l.*, when a call of 30*s.* per share was made; but at the present account there was a considerably reduced balance, and it was necessary to make a less call—1*l.* per share; therefore, the operations of the past quarter, as compared with the previous one, had been characterised by two very encouraging features—a reduced cost and an increased return; and calculating the current monthly expenditure at about 650*l.* to 700*l.*, it was not too much to hope that the present returns of tin, even at the existing depressed price, would meet the outlay. As regards the mine, it was not too much to say that its prospects had not only materially improved, but that they were now of an encouraging character. It would, no doubt, be recollected that one of the objects he had in view in adjusting the long-pending lawsuit, was to enable the ground, now known as Grylls Wheal Florence, to be developed; and as the erection of the engine upon that sett had so far progressed as to be working in a few days, they, in Wheal Grylls, would soon be able to reach some previously inaccessible good tin ground. Another point of considerable importance was at that portion of the sett known as Badger's Croft. When on the mine on Friday last, accompanied by Mr. Cooke, their attention was specially directed to the extensive operations which had been carried on at that part of the mine by the "ancients," who had extended their works as far as they were able without the assistance of machinery. Operations were now being vigorously prosecuted at that place, and there could be no question that something of importance would be found there. He knew that those in the district were most sanguine about this piece of ground, although hitherto it had been neglected. As regards Georgia, that still continued poor, and, indeed, there must be a further outlay if that part was to be vigorously worked. He need hardly say that he did not go underground himself; but, believing in the truthfulness of their agents, he accepted their reports with confidence, and thereby formed his opinion as to the position and prospects of the mine. All he could say was that he believed, even with the present price of tin, they would be able to work the mine with vigour, without incurring liabilities, and during that development they might confidently hope to make important discoveries.

Mr. Nixon enquired to what extent had the returns of tin been increased, as compared with those during the preceding quarter?——The Chairman said that the increase had been nearly 10 tons, and the costs had been decreased about 500*l.*

Mr. E. Cooke said he believed their purser had been greatly instrumental in curtailing the cost, having made several valuable suggestions, the adoption of which had produced the desired result, and he (Mr. Cooke) thought the expenditure had now been reduced as much as possible, consistent with the efficient development of the mine. He was inclined to think that their dressing-floors and plant had, perhaps, been laid out upon a scale somewhat too elaborate, but should discoveries again be made—about which he did not entertain the shadow of a doubt—they had the satisfaction of knowing that the mine was provided with an effective dressing power equal to any requirements. There was every reason to believe they would soon see much better days, because, as the Chairman had already informed them, the costs had decreased and the returns had increased, and still were increasing. A point of importance was the lode under Pressure shaft, going towards East Grylls, which was worth about 10*l.* per fathom, and as they paid only 2*l.* or 3*l.* per fm. for driving a lode worth 10*l.* per fm., it was equivalent to one in other mines, where the ground was hard, worth (say) 30*l.* per fm., as for driving upon such a lode they would probably have to pay 15*l.* per fm. It would be remembered that at the last meeting he complained that Capt. Rogers's estimates had not been realised, although he (Mr. Cooke) was bound to confess that the non-realisation had been occasioned by circumstances which could neither have been foreseen nor averted. A reference to the report just read would show that during the past quarter Capt. Rogers' estimates had been fully realised, the costs having diminished and the returns having increased. Shareholders must not forget that in Wheal Grylls they possessed a mine the resources of which it would take years to develope; and he had no doubt that by a little further steady development Wheal Grylls would soon re-occupy the enviable position which it so long maintained.

The Chairman said there could be no question the extensive floors and plant had cost the company several thousand pounds. The opinion of the agents at that time was that Georgia would continue to be productive, and no one could say how soon it would again become rich.——Mr. E. Cooke said that, while conversing with the agents upon this point, Capt. Rogers remarked, "that although Georgia had unfortunately fallen off, yet the other parts of the mine were just the same." As regards the ground in and around Pressure shaft, it was satisfactory to know that there was being left as much tinstuff as taken away; and, if it continued, it would prove a very fine thing for the mine.

The accounts were passed and allowed, and the report was ordered to be entered on the minutes.——A call of 1*l.* per share was made.——The committee of management were re-elected, with thanks for past services——A vote of thanks to the Chairman terminated the proceedings.

EAST WHEAL GRYLLS MINING COMPANY.

A general meeting of shareholders was held at Mr. Peter Watson's office, Old Broad-street, on Wednesday,—Mr. Peter Watson in the chair.

Mr. W. Watson (the secretary) read the notice convening the meeting, and the minutes of the last were approved. A statement of accounts was submitted, which showed—

Balance last audit	£ 949	15	1			
Labour cost	1233	9	7			
Merchants' bills	237	17	11			
Dues	46	9	6=	£2467	12	1
Calls received	£1242	7	8			
Tin sold	865	10	9=	2107	18	5
Leaving debit balance	£ 359	13	8			

The report of the agents was read, as follows:—

Oct. 10.—We beg to hand you our report of the present prospects and work done during the last three months.—Middle Lode: The 17 is driven west 14 fms.; the lode during the greatest part of this drivage has been very hard, producing a little tin that would leave a small profit on stamping; but the last 5 fms. have shown a decided improvement; the end is now worth 6*l.* per fm., and driving at 2*l.* per fm., the back of which will be taken away at a good profit when there is a communication made to the level above. Anna whim-shaft is sunk 10 fms. under the deep adit, and a level driven west at this point 10 fms.; the lode in the end is poor, and, therefore, suspended; and the back set on tribute at 12*s.* in 1*l.* The adit level is driven east 7 fms., and north 4 fms.; about 10 fms. more driving in this direction will communicate with Curtis's shaft, where we expect to open up a valuable piece of ground. The 17 fathom level from surface has been extended east and west 18 fms., through a lode now working by tributers at 5*s.* in 1*l.*; the lode in both ends is poor. From the bottom of the level we have sunk Curtis's shaft 8 fms., driven the 25 fathom level 9 fms., hoisted a rise to the level above, and commenced sinking the shaft below the 25, where the lode is worth 5*l.* per fm., and sinking at 3*l.* per fm. The ground driven and sunk through in this part of the mine will be taken away by tributers at 5*s.* in 1*l.*—Fisher's Lode: The 10, under adit, is driven east 4 fms. through a lode that is now working by tributers at 10*s.* in 1*l.*; the lode in the end is 18 in. wide, producing a little tin, but not sufficient to pay for working. At surface we have erected sheds over the greatest part of the dressing-floors, made several additional frames for dressing the slimes, and a cart-road direct from Curtis's to the steam stamps; cleaned and sold 15 tons 0 cwts. 2 qrs. 22 lbs. of black tin, amounting to 865*l.* 10*s.* 9*d.* There are employed in and on the mine 110 persons. During the last quarter we have increased the quantity of black tin, as promised at the last meeting, but the drop in the price has made a considerable difference in the amount. We are glad to say that we expect to go on gradually increasing the returns, and to meet the cost even at the present low price of tin. Our dressing-floors are in a forward state, and the mine in a better state of working than it ever was before since we commenced working; therefore, the merchants' bills and the surface cost will not be so high as they have hitherto been.—E. Rogers, J. Pope.

The Chairman said in the accounts just presented there were two or three items for providing the mine with additional plant, but he thought he could safely say that nearly the whole of the heavy cost which must be incurred in the laying out of a tin mine had now been met. But although in the accounts before the meeting there was included a large expenditure on account of plant, yet the loss was much less than that incurred during the preceding quarter. As regards the mine, its prospects had greatly improved, and were still improving, and he hoped and believed that by a steady, economic, and vigorous development East Grylls would soon be brought into a profitable condition. The interest which he held was a guarantee that he had confidence in the property. As regards its financial condition, he had carefully examined the books, and consulted with the purser, who was of opinion that a call was not necessary upon the present occasion, as he hoped the returns would not only meet the costs but wipe off the debit balance.——Mr. W. Watson (the purser), replying to a question, stated that he saw his way pretty clear to make the mine pay its costs.

Mr. E. Cooke said he was much pleased to see the forward state of the dressing-floors, and the efficient way in which they had been laid out. He had great faith in the future of the mine; indeed, without wishing to make any invidious comparison, he might say that he regarded the East Grylls sett as one of the best pieces of ground in the whole of that district. He was glad to hear that, notwithstanding there had been incurred during the past quarter a large additional expenditure, the loss was less than that of the preceding three months, and he hoped they would continue to increase the returns and diminish the costs; at any rate, there could be no question that nearly the whole of their heavy outlay had been incurred.

Mr. Foord enquired the calculated amount of the next three months' costs?——The Purser replied that the cost of the first month of the current quarter would be heavy, but each of the other two months' costs would be less.

The accounts were passed and allowed, and the report was ordered to be entered in the minutes.—A vote of thanks to the Chairman terminated the proceedings.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market continues dull, and the transactions of the week have been of a very restricted character. Although the usual fortnightly settlement and account (which took place to-day) generally provokes a little more activity, in this instance it was not observable, probably arising from the lightness of the account. Shares generally show a weaker tendency, without any apparent cause as regards the mines—thus affording a favourable opportunity for purchasing before a reaction takes place.

Wheal Seton and West Seton have been very inactive, and quoted lower.—Cliffords have been dealt in with some slight fluctuations as to prices.—Cook's Kitchens have been in request at minimum rates.—Tincrofts have receded and offered much lower.—Wheal Bullers have changed hands at nominal prices.—South Frances have declined and freely offered.—Great Laxeys continue in demand at fair market prices.—East Grenvilles and Wheal Grenvilles have been freely dealt in, but prices have fluctuated, and left off weaker.—North Treskerbys are rather quiet, but buyers at lower rates.—West Downs have been in request, but since receded in price.—Carn Carnbornes have been freely dealt in, and still sought for at buyers' prices.—East Rosewarne and Hallenbeagle have receded, and offered freely at quoted prices.

Great North Downs and Great Busy are quiet at minimum rates.—West Chiverton and Chiverton have been done at lower rates.—East Lovells are in better demand, and show a tendency to advance.—Great Wheal Vors have fluctuated, but left off firmer.—Providence shares enquired for at nominal rates.—South Darrens have been in good demand at improved rates, consequent on a reported improvement at the mine. —East Caradons have been rather freely dealt in, but prices have varied.—Marke Valleys are quiet at quoted prices.—West Caradons have been done at nominal figures. —Trelawny and Mary Ann are quiet.—South Caradon Wheal Hoopers have changed hands at nominal prices.—Kelly Brays have been in fair demand at minimum rates. —Hingston Down and Bedford United are sought for at buyers' figures.—East Wheal Russell and Crebor have been freely dealt in, and prices have fluctuated.

East Caradon has improved in several ends since the last report. Williams's shaft is now down for a 90 fm. level. The cross-cut is extended 16½ fms. towards the south lode, and will intersect it in about 2 or 3 fms. further driving. Seccombe's shaft has been sunk 13½ fms. below the 35, and we have about 7 fms. more to sink to make the shaft equal to the 50, perpendicular from Williams' shaft, which they purpose doing before cutting into the lode. The development of the north lodes is deemed the most important feature, and the great element of future results and permanency of the mine, and, therefore, looked at with deep interest.—Caunter Lode: The 80 east is worth 10*l.* per fm.; the 80 west, 15*l.*; the 70 east, 20*l.* per fm.—New Lode: The 80 west is valued at 15*l.* per fm.; the 80 west, 7*l.*; the 60 west, 7*l.*; and the 70 east, on the south lode, is worth 6*l.* per fm.

Marke Valley, upon the whole, is looking much better, and will, in all probability, increase its returns. Salisbury shaft is down to the 112. Marke's lode, in the 100 east, is yielding 1¼ ton, and west 2 tons per fm.; the winze to the 90 is communicated, and worth 3 tons per fm., and is 20 fms. in advance of the 100 end.—Rose Down: The lode in the 90 west is worth 2 tons per fathom; the 80 west is yielding 3 tons; the midway level west is worth from 3 to 4 tons; the 60 west, on Fisher's lode, is worth 2 tons per fm. All the stopes are yielding about the usual quantity; and the south cross-cuts, in the 50 and 80, are progressing satisfactorily.—West Rose Down: The engine-shaft is down 3 fathoms below the 30, or 62 from surface, and every necessary arrangement making preparatory to driving the cross-cuts towards the lodes. Driving east in the 15, by the side of Fisher's lode, the ground is favourable. The deep adit cross-cut has been driven south about 30 fathoms; the new shaft has been sunk about 3 fms. In the south adit cross-cut they are driving west on two lodes, each of which has been opened about 7 fms., and is of a promising character. The erecting of the steam whim-engine house is going on satisfactorily.

New Birch Tor and Vitifer Consols.—The prospects here continue of the same encouraging character as for some time past. The several productive places in the main lode are yielding the usual quantities of tin. The north lode is also looking well at several points, most of the ends being of an improving nature. In the new whim-shaft the lode has improved, and now worth 12*l.* per fathom. There are several other places looking well, with general appearances of some improvements near at hand.

Wheal Trevenna.—The eastern deposit of tin in this mine is reported to continue of the extraordinary size of 36 feet in width, producing 2½ cwts. of tin per 100 sacks of tinstuff, and improving as laid open. About 400 fms. further west they have sunk a shaft 5 fms., and still find it worth 4 cwts. of tin per 100 sacks. There are other places of great interest and encouraging prospects, to which operations are being directed, but not sufficiently developed to state with any degree of certainty as to its value.

Okel Tor.—In the 65 they have commenced rising against the winze sinking below the 50, which, when accomplished, will enable them to operate upon a course of ore for 60 fms. long, between the 50 and 65 fm. levels.—Calstock Consols: The pitch on the engine lode continues to maintain its size and value, and is being taken away at 20*s.* per ton. Driving west towards the large gossan lode laid open at the railway, the end is becoming very wet, which is looked upon as a very good feature for a productive lode. The south cross-cut towards the Okel Tor lode continues in a most beautiful channel of ground. Other points of operation are looking very promising.

Cornubia Tin still continues to look well in all the different points of operation. The 70 east and west, with the stopes, are turning out fair quantities of good work for tin. The new, or No. 2, lode is producing some excellent work. The western part of the mine is being laid open, and from the general appearance of the lodes, there is every reason to calculate on fair returns, which will augment the monthly parcels. They sold on Friday last 4½ tons of tin, realising 293*l.* 5*s.* 8*d.*, which gave a profit of about 30*l.* for the month.

Carn Camborne.—The engine-shaft is down to the 40, and cross-cuts commenced north and south; they have intersected a lode 2 fms. south of the shaft, which is opening out remarkably well; the east end yielding 2 tons per fathom, and the west end 2½ tons. The 30 ends, east and west, are worth about 1 ton per fm. each. In the 30, on the north lode, the prospects are improving, with a good lode in back, worth 2½ tons per fm. At Clark's lode the prospects are very encouraging; they have recently intersected a branch in the 30 cross-cut, which they are about opening on. The western shaft is down 11 fathoms, and the lode yielding stones of ore. The mine is looking very encouraging, and is much improved since the last meeting.

South Lovell.—The clearing of the old workings continues with spirit, and, so far as can be seen of the portions of the lodes which are left standing, there is not the least doubt of all that is anticipated being fully realised.

Chiverton.—The progress being made in clearing the levels is going on very satisfactorily. Murray's shaft is now clear below the 50, and Cookney's shaft also clear to the 30, and they are about to drive to communicate with the former to secure good ventilation, and other purposes.—West Chiverton continues to look well. The 80, west of Williams's lode, is worth 60*l.* per fathom, and the 70 west is improving very fast, the present end being of the most promising character. The winze in the 80 west, on Valpy's lode, is worth 35*l.* per fathom, and the winze below the 70, on this part, is worth 60*l.* per fm. The stopes, as well as all other productive places, continue to yield the usual quantities of silver-lead ore. They are pressing on the cross-cut in the 90, and expect to intersect the first lode in about a fortnight. They sold on Wednesday last 120 tons, realising about 1700*l.*—At Wentworth the prospects continue to improve, and important discoveries fully expected as the ground is opened. In the adit level they have a large and promising lode, yielding fine stones of lead.—At Mineral Bottom they are progressing wonderfully well in sinking the engine-shaft, as well as in the building of the engine-house, and all other surface operations.—Chiverton Moor engine is expected to go next week.—At Mount Carbis a very promising and productive lode is in the end east, now worth full 20*l.* per fathom for tin. The engine-shaft is down to the and they are driving south to intersect the lode at that point. The general prospects the mine are considered very good.

New Rosewarne.—The lode at the shaft continues large, worth 60*l.* per fm. The west, and the stope in back, are worth 65*l.* per fm. together. The stopes in back of 64 are yielding some good and profitable work. There are several other points in different operations looking remarkably well, producing very excellent work, and mine, upon the whole, is looking much better than for some time past.

South Darren, like its adjoining neighbour, Great Darren, has considerably improved, and the prospects at present are of the most encouraging character. The adit west is presenting the most favourable appearances for an early improvement. In the 20 west, after driving about 2¼ fathoms north on a branch, a good course of both copper and lead, has been discovered, and considered of great importance, inasmuch as it appears to be above the best part of the lode in the 30, and whole from that point to the surface. The several other levels are yielding the usual quantities of both copper and lead. The operations which are being directed to other places are likely to turn out shortly some very important discoveries, and increased returns may be fairly looked for both in copper and lead.

Great Darren.—The operations on the recently-discovered course of ore in the 15 fm. level are chiefly directed, at present, to driving east and west by the side of the lode, preparatory to taking the same down, which, when completed, and sufficient working-room be given to the men, a larger force will be employed on this extraordinarily large and productive lode. The lode in Oliver's adit continues to yield the same quantity of silver-lead ores, and other places maintain their value and importance.

Bryntail.—The prospects here, which for a long period have been rather discouraging, have very much improved. In the 10 they had a good course of lead ore, though short, which looked better in going down. They have now cut an excellent lode in the 30 fm. level, which is reported to be 1 ft. wide, solid, from whence a good parcel may be shortly expected; and, as they are down to the 30, and driving towards the point where they expect to meet with it in that level, should the ore hold down there is reasonable grounds to anticipate large and profitable results after years of forbearance and perseverance.

Bedol-Aur.—The progress of the operations here is going on very satisfactorily, and from present prospects likely to open up very profitable. The end in the 30 is not quite so good as last week, arising from a change in the ground and the approximation to another lode, which is considered an important and favourable feature. The stopes continue to maintain their value and appearance, being worth 1 ton of lead per fm. The first sale of lead may be expected in a few weeks, when 20 tons are likely to be offered.

James Lael.

From Mr. James Crofts:—At the present moment, when the minds of speculative capitalists, and others who are diligently seeking for an augmentation of their come, are more than usually mystified as to the choice of investments, and particularly when metallic mines are admitted into their deliberations, it may be useful, by way of illustration, to make a few remarks on the nature and merits of the latter investment. The real difficulty that arises with the public being in the choice of the mining stock to be operated upon so as to avoid doubtful or worthless concerns is the habit, which with some is a fixed one, of decrying mining properties altogether, and has its origin in the losses sustained by confiding and inexperienced persons, by either being themselves over sanguine as to the results of a given speculation, or from being wilfully misled by specious reports and representations, miserably deficient in the element of truth, the sequel being in numerous cases the entire loss of their capital embarked in such. As a striking proof of the value of a large number of mining properties, it may be mentioned that there are nearly 60 concerns in the Dividend List of the *Mining Journal* standing as having paid dividends within the present year, and up to the present hour, two examples of which are very remarkable for steadiness of production of copper ores, and the handsome rate of profits distributed to the adventurers every two months, the statistics of which are totally destructive of all scepticism as to the merits of British mines, when properly demonstrated and understood.

Ex gratia: The South Caradon is a copper mine in the parish of St. Cleer, two Liskeard, Cornwall, in 512 shares, upon which only 1*l.* 5*s.* per share has been paid, whilst it has returned in dividends 452*l.* 10*s.* per share, being a total of 231,710*l.*, 8 per cent. per annum, to its fortunate adventurers, and is in full work, yielding an enormous produce of ore, and so likely to continue for a number of years to come, the mode of working the mine being to make constant fresh discoveries of ore, and leave them in reserve, to be used only when other discoveries are made, to form future reserves, such mode of working and procedure being properly and deservedly designated "legitimate mining." The Devon Great Consols, near Tavistock, has been about 20 years at work, and is a still more striking incidence than the above of high success in British mining. The shares are 1024, with 20*s.* paid upon each, and it has returned 953*l.* per share in dividends, or upwards of one million sterling. The price of one share at present is 60*l.*, and the dividend per share (paid two monthly) being 60*l.*, the income upon the present cost is 10 per cent. per annum. Like the South Caradon Mine, it is also worked upon the system of large reserves, and it appears from the late annual report of the directors that the extent of the reserves is equal to four years' average raisings of ore, the monthly produce being from 2000 to 3000 tons. Investors, therefore, in both these mines are always free from anxiety as to any unexpected stoppage of the supplies of ore, or of their suddenly becoming of an evanescent character, a new grant of land having lately been added to the eastern part of the mine, for which 20,000*l.* was paid as a bonus (in addition to dues) to the land owner, the Duke of Bedford, who derives an annual income in dues from this mine alone of upwards of 10,000*l.* Numerous other instances could be given of dividend mines of equal merit, and, indeed, superior as regards the rate of dividends (some going as far as 20 per cent. per annum), but the South Caradon and Devon Consols are merely intended as examples of highly successful mining, sufficiently striking to command attention.

It is not intended by the preceding remarks on dividend-paying mines to disparage what are properly designated as "progressive" ones, or such as have not yet arrived at the dividend period, and for the very good reason, such are the chances in and of the science of mining, that it very frequently happens that this class of shares yield large profits more suddenly than dividends, a rise of *cent. per cent.* not being by any means an uncommon event as a consequence of an improvement in the lodes. The writer has for a long period communicated his ideas to the public on Bryntail Lead Mine, near Llanidloes, in Montgomeryshire—namely, that a large deposit of ore would some day be found in the 30, and now, suddenly, there is a lode 1 ft. wide, solid ore, equal to 4 tons or 50*l.* in value per fathom, and the shares, after a very long period of depression, have risen in price accordingly, but inasmuch as the shares (1832) have cost a high price (6*l.* or 7*l.* a share), there will not be a large number for sale, and they, it is presumed, will be chiefly absorbed by present holders to average cost. The quotation is 3 to 3¼. North Chiverton has also this week gratified its promoters by a sale of blende (the ore of zinc) of 50 tons, at the unexpected price of 5*l.* 12*s.* per ton, being equal to, or rather above, the average of Cornish and Devon copper ores, besides that lead (the legitimate produce to be looked for in this mine) is also appearing, and samples drawn from the lode. From South Darren also there is news of a great improvement, the salient points of which appear to be that in the shallow adit "spots of lead ore. The 20 west has greatly improved, and now after 15 ft. driving a good course of ore, both copper and lead. This is very important, as it is above the best part of the lode in the 30, which is untouched as a whole, not only to the 20, but now it may be so to near the surface."

The writer having about a year ago transacted a tolerably large commission business in the shares of the Twelve Apostles Amalgamated Lead Mines, situated adjoining the Central Minera, near Wrexham, has, after a long period of doubt as to the merits of the mines and their management, now an opportunity of referring to their present position in both respects. A circular was issued by order of the "board of directors," dated Sept. 30 last, referring to a contemplated new issue of shares (implying thereby that the capital raised on 12,000 shares was already exhausted), and "to consider the expediency of placing the management of the mines on a more satisfactory footing." The invitation for more capital does not appear to have been responded to, and another meeting was held on the 10th inst. at Leominster in consequence, at which, as the writer is informed, the question foreshadowed in the company's circular, mentioned above, was rather effectually carried out. The manager, Mr. T. W., having, in the first place, tendered his resignation, which was most gratefully accepted, and the future services of Mr. H. W., the captain, also dispensed with. An economy was effected also as regards the salary of the secretary, and the meeting ended by an agreement to issue 3000 preference shares of 1*l.*, to bear interest at 10 per cent.; and since a majority of the original 12,000 shares are held in the town of Leominster, it is more than probable that the new capital will all be subscribed there. The writer refrains from repeating some strong remarks made upon the individuals who have now left the management of this concern, in the expectation that the changes made will effectually conduce to the future welfare of a mine of unquestioned merits; and, touching the production of ore, it appears that they are raising 15 to 20 tons per month from the Twelve Apostles alone, which portion of the property being much improved and improving, excludes whatever may be the merits or demerits of the other two mines composing the amalgamation—namely, the West Minera and the Rock. The writer suggests to the new management that a report, perfectly independent of the old, should now be made by a competent lead miner of the district, and if the two last mentioned setts (as has been reported) are worthless, that they should be abandoned, and the explorations and expenditure concentrated upon the Twelve Apostles proper.

The Mining Market is still very depressed, with the exception of fitful moves here and there, stimulated by improvements, more or less unexpected, in progressive stocks, when business in them becomes active, proving that under any circumstances of depression capital is always waiting for employment, and ready to respond to the opportunity. But other mines, which in the ordinary course of things would be stationary, recede in value for want of market support; as, for instance, Wheal Grenville dropped this week nearly 30*s.* per share, whilst East Grenvilles maintain their value of nearly 7¼. Wheal Crebor, Nangiles, East Caradon, Great Laxey, Von, Bedol-Aur, North Roskear, Seton, Clifford, and Trelawny are all good. West Caradons have descended to 5; East Russell, 4¼ to 4¼. Tincrofts, quoted 16 to 17, should be bought as an investment, waiting an improvement in the value of copper ore.

From Mr. William Lelean:—If the commercial failures of an ordinary twelvemonth could be brought within a single week, the impression produced would be almost appalling. The isle would be "frighted from its propriety," and a panic would probably be the result. Several causes have operated—some of them wholly independent of ourselves—to produce much more than the average number of large failures within the last month or so; but, as I last week suggested, there is nothing in the fact, serious as it is, that should alarm us. To the Leeds Bank failure many of those of the last few weeks are directly referable; and of the others some have been indirectly influenced by it, some have been for a long time tending towards bankruptcy, while the small residue result from large speculations which the turn in the price of cotton has made ruinous. It is very desirable that we should guard ourselves against being run away with by groundless fears of the present state of our commercial and monetary condition. I am "neither a prophet nor a prophet's son," but I have all along insisted upon it that, so far as human ken could reach, there were no causes in operation that should

apprehensions of a commercial crisis, and that if a panic occurred it would be attributable mainly, if not wholly, to the false prophets abroad, who were working on the fears of the timid and the uninformed, and not to any unsoundness in our trading, commercial, or monetary affairs generally.

Stocks and shares, of all descriptions, are adversely affected. Consols have gone down to an extremely low price, and all other kinds of investments and securities have partaken of the depression. We have been affected by a concurrence of unusual circumstances, which has drawn away large quantities of our money—that is, of our coined money, which is the basis of our currency—and made what remained dear and difficult to be got hold of. This necessarily affected all whose monetary obligations were impending, and whose circumstances would not admit of the augmented rates of discount which obtained. Whatever the amount of undue commercial speculation may have been—and there has, no doubt, been a good deal—its effects were comparatively limited. If there were reason to fear lest prejudicial results should follow upon this, there is good ground to believe, as the *Times* of Monday remarked, that "a large majority of the trading classes, as well as of the public, had the prudence to act upon their misgivings, and to fortify themselves for the pressure, in which lay the only hope of cure. That pressure has now, for a time at least, done its work, and all the features of our recent position are reversed. Money is flowing into the country, instead of flowing out of it, and speculators, instead of sending up the prices of foreign produce by reckless transactions, to be paid for by the manufacture of accommodation bills, are, through either compulsion or terror, sacrificing their purchases at any reduction, to provide for the liabilities they are summoned to curtail."

These are the assuring facts. Now comes the advice, and I am glad to reproduce it, in confirmation of that I have been more feebly giving for some weeks past. "Except where political influences are in operation," says the *Times*, "there is no rule more certain than that the prices of securities will be regulated by the question whether capital is being sent to us or withdrawn from us. For the moment, however, all that can be said is that quiet investors should not allow themselves to be frightened into sacrifices. For some little time yet there may be a degree of agitation and uncertainty, which, but for the happy fact that, contrary to what was the case a few years back, the number who are ignorant of financial principles are now a minority instead of a majority, might grow into something approaching a panic. But whatever individual instances of speculative failure may be inevitable, or may be brought about by a withdrawal of assistance in special cases, just when its withdrawal is most injudicious, all that the great body of the mercantile and commercial public have to do is to watch with perfect confidence the course of the operation in progress, and which, if it were more rapid, would, in the prospect of its permanent results, be proportionately less satisfactory. For just in proportion as caution was necessary with respect to investments, even of the soundest character, before the alteration was wrought, might confidence now be logically entertained." Needy holders of stocks or shares must part with them for anything they can get; prudent investors will avail themselves of the opportunity to purchase upon easy terms; and though mining shares have not been so much depressed as most other species of investment, some of undoubted worth are to be had at much less than their real value.

Of these I last week enumerated several, some of which are already paying large dividends, and some of them promising, at no remote time, to pay still larger ones. The reports subsequently received from some of the mines of the latter class show their progress, with those occasional interruptions to which such operations are necessarily incident, towards this consummation. I may notice that, on the 10th, the North Chiverton sold a parcel of blende (about 50 tons), which realised 5*l.* 12*s.* per ton, that their ore sampling will be bi-monthly, and that they reasonably expect that they will soon be able to defray the costs of the mine by the sale of that mineral only. The Leawood mine, formerly known as Wheal Fanny, and comprising about 1000 fathoms in length of rich mineral land, with a very large lead lode running right through it, and which acts as a cross-course to a copper lode, two of which pass through the same ground, promises, from the vigorous operations now being carried on, to become a fine property, and that soon. The Great Laxey progresses as satisfactorily as the most sanguine could wish. The 190 fm. level is now worth 80*l.* per fm.; the 180, worth 70*l.* per fm.; and the 165 fm. level stopes, worth 200*l.* per fm.; the 110 is worth 80*l.* per fm.; the Dumbell's new 70 fm. level, driven 5 fms. from the shaft, is worth 100*l.* per fm.; the 155 is worth 60*l.* per fm.; and the stopes in the 60, in some places, are worth 100*l.* per fm. Nothing could be more satisfactory, especially to those who, like myself, have always strongly recommended the mine. The Great South Chiverton progresses very well, as a glance at what has been accomplished within the short space of six months will show. They have cut open the adit 40 fms., and have driven underground 160 fms.; of which 140 fms. have been driven in one end, and 20 fms. east; 40 fms. of shafts have been sunk, and nearly all the ground is close timbered. They are within 15 fms. of the lode, on the road, in the west end, and hope to reach it this month. Comparing the work done with the money expended, the progress is satisfactory, and the prospects good.

The East Providence also progresses most favourably, and promises to turn out another Providence. The 70 fm. level, south from Boorman's shaft, is driving on the Providence flookan, and there are about 6 fms. more to be driven to intersect Bamfield's lode, where good results are anticipated, when they drive east, under the long run of ground passed through in the level above, where the lode is worth 20*l.* per fm., and which is being driven from junction 26 fms., through a lode varying in value from 10*l.* to 40*l.* per fm. The winze below the 60 east, on Bamfield's lode, is worth 20 per fm., and is being pushed on to the 70. The stope in the back of the 60 east is worth 18*l.* per fm., and that in the bottom is worth 25*l.* per fm. In fact, they have a quantity of tin ground laid open throughout the mine, which will be taken away as soon as their new engine for drawing and stamping is completed. It is confidently believed that another rise of 5s. will place the mine on the Dividend List. The shares, 3986 in number, with 2*l.* 8*d.* paid, are very cheap at the present price, 3 to 3¼.—The Bedford United, which adjoins the Devon Great Consols, pays a regular dividend of 2*s.* 6*d.* quarterly, and should they cut the Tavistock lode rich, in the cross-cut, which is being actively pushed forward, there will be a considerable rise in the price of the shares, which are now receiving a high rate of interest, and should be at once purchased. The last dividend was declared on the 12th inst. The Tavistock lode, which is very rich in the Devon Great Consols, runs through the entire length of the Bedford United.—Of the Wheal Russell, Capt. Richards, of the Devon Great Consols, says, "My opinion as to the chances of the 130 remains the same as ever," which is of a highly favourable kind. He expects a good lode there, and I confidently anticipate a considerable rise in the price of the shares, which should, therefore, be at once purchased.

From Mr. Edward Cooke:—With the exception of the dealings in a few mines, business is inactive. The present uncertainty and stringency of the money market will not continue much longer. Indications tend towards a favourable reaction as exchanges from the East are in favour of England, which causes the exports of silver to be on a comparatively small scale, while gold continues to be sent into the Bank without any corresponding withdrawals. It is only a question of time—and that period may arrive sooner than is generally expected—when a return of general business will result from a return of confidence on the part of the commercial community. The enormous amount of capital that has been absorbed by the various financial companies during the past two years has, no doubt, been instrumental in contributing to the late revulsions in the money market. The high premiums of the shares, and the promised profits set forth by some of the companies, no doubt induced a great number of the public to invest, not only their available capital in them, but also to speculate to a large extent. The operations in this manner have assisted in keeping up the high price of money. The disclosures made by recent failures outside the Stock Exchange prove, too, that mercantile men have been large operators in other than their own legitimate business, by speculating in foreign stocks, bank and financial shares, &c., and thus increasing the demand for money beyond the necessary requirements for their legitimate business. Things will, however, soon right themselves, and there will be a great revival in prices of all kinds of stock; and as that of British mines comes more within my province, I venture to hope that they will participate in the general advance, at least such of them as are deserving of notice.

Mining property has been much depressed of late, but when, however, the amount represented by the decline in the great financial companies' shares—International, General Credit, London, Imperial, Hudson's Bay shares, &c., is taken into consideration, it will be found to be some three millions sterling. Why, the losses to those who bought into these companies at high premiums, and are obliged to realise now, are enormous, as compared to the decline in the value of mining property, while the chances of mines becoming suddenly rich are frequently occurring in good mining districts. Having recently visited several mines, I have been enabled to form an opinion of their present prospects, and that for the future. Great Vor is unquestionably a splendid property, and, although very rich at the present time, it has not, in my opinion, reached the height of its prosperity. Tincroft, as the next best tin mine in Cornwall, is becoming more and more productive. The manager states the prospects have so improved that he promises 120 tons of tin for the current quarter. Judging from his usual caution, I have no doubt the quantity will be much greater. The shares are a safe investment. East Grylls is returning sufficient tin to pay its working costs. The prospects of further improvement are very good. Wheal Grylls is looking better than for some time past, and in the eastern part, going towards East Grylls, a good profitable lode is being worked upon. These mines will advance in price on a favourable reaction in the market. At Grylls Wheal Florence there is a rich pile of tinstone, which will be reduced to black tin when the stamps are erected. The lode in the shaft is still worth above 10*l.* per fathom for length of shaft (8 feet). There appears every probability at present of this becoming a profitable mine. At East Wheal Vor the lode in the shaft continues to improve, and there is every probability of its becoming in depth equal in richness to the same lode in the adjoining mine—Great Wheal Vor. Owing to the general dulness now prevailing the shares may be bought at a price that will pay well for buying. There is between 4000*l.* and 5000*l.* in hand (or rather on deposit at interest) for the future development of the mine, so that the chance of any further call being required is quite problematical, while in the meantime a rich and lasting mine may be opened up. At Great East Lovell good progress is being made in the erection of the engine-house. Whoever is possessed of these shares will do well not to part with them, but if possible to purchase more. I am not advising in this matter the thing I am not doing myself, being very confident that the East Lovell district will, by-and-bye, be better understood by the public generally. A short account of the East Lovell meeting was inserted in last week's Journal. The shaft will require a short time longer for its completion, when the tin will be raised to much greater advantage. The shares have been largely dealt in during the week.

I was at North Chiverton on Saturday, and was very much pleased to see the progress that is being made in the dressing-floors, &c. But what gave me the greatest pleasure was to see the very nice piles, both of lead and blende, at surface. The latter predominates at present, and is of a superior character, the richest, I believe, in Cornwall. The 50 tons, sampled on Tuesday last, was purchased by Vivian and Sons, at 5*l.* 12*s.* per ton, or nearly 2*l.* per ton above the previous parcel. This alone tends to establish the character of the mine, as there are large quantities in the several lodes traversing this sett. It is now being raised from two lodes that are producing lead also, fine samples of which may be seen at my office. In a short time the celebrated rich Old Shepherds lode will be intersected at a depth at which it will, no doubt, be productive. In Old Shepherds this lode is known to have produced enormous quantities of lead, and it is not unreasonable to expect it will be found productive in North Chiverton also. Should such prove to be the case it will become a dividend property very soon. In addition to the lodes alluded to there are several others in the sett of a most promising character. If this mine were what may be termed a market mine, the shares would be double their present price, and I do not hesitate in saying that the prospects of this property justify their being much higher than they can at the present time be bought at. Capt. Nancarrow, who inspected North Chiverton a few days since for a shareholder, concluded his report by saying that no one could honestly report unfavourably of this mine; and, if he could afford it, he would like to hold a large interest in it himself. At South Darren a very important discovery has been made in the 20 fm. level cross-cut north. Another part of the lode has been met with, containing lead and copper of a very promising character. This, together with the other rich parts of the mine, places it in a position not only to pay its own working costs, but to leave a profit to the shareholders. This is a limited company to 3*l.* 10*s.*, with 3*l.* 5*s.* paid. The shares are cheap at par. The public will do well to buy into a few good mines while they can do so at such prices as at present exist.

Mine Accidents.—At Marke Valley Mine, on Saturday, two brothers, Isaac and Edward Pollard, were killed by the premature explosion of a hole they were tamping with an iron bar. One was holding the bar, and the other beating it with a hammer. This affords another evidence of the necessity for using copper-tipped tamping bars exclusively.

Mining Correspondence.

BRITISH MINES.

ABERDOVEY.—A. Ede, Oct. 10: The lode in the stope is much the same as it has been for some time past, producing 6 cwts. of lead ore per fm. I have had a letter from Mr. Davies, begging of me to keep on the engine-wheel a little longer. We are obliged to be attending constantly to it; it cannot stand much longer.

ALLT-Y-CRIB.—J. Hughes, Oct. 10: The lode in the deep adit has increased from 4 in. to 4 ft. in width, and from being a soft flookan has changed to hard slate and quartz, containing spots of lead and copper ores, and the end is still about 10 fms. from being perpendicularly under the eastern extremity of the old workings, which are 50 fms. above the deep adit, and 80 fms. in length; an important change and improvement appear, therefore, to be immediately before us. The quartz is in two ribs; one 2 ft., the other 1 ft. in width, and is of a similar character to that which was broken in the shallow level, and found to contain 5 dwts. of gold and 12 dwts. of silver per 20 cwts., but is in very considerably larger quantity. In the shaft now being sunk through the old workings from the surface, and to be continued down to the deep adit, a course of ore has been cut on the north wall at 10 fathoms from surface, that will yield 15 cwts. of lead ore per fathom, and as this appears to be dipping fast to the north, and is not seen in the level at the bottom of the old workings, it very probably was not seen by the old men, but is standing whole from the depth mentioned. The tributers in another part of the mine have about 8 tons of ore broken. I consider the immediate prospects of the mine never to have been so good as they are at present.

BEDFORD CONSOLS.—Capt. Michell, Oct. 13: In the middle adit level cross-cut north we have just passed through a branch bearing a little north of east, which contains spar, mundic, flookan, and a little white iron; the men are working well, and good progress is being made.

BEDOL-AUR.—Oct. 12: The 70 end is producing 6 cwts. of lead per fm.; the ground has become harder than it was, which we consider an indication of our near approach to the Belli Gwyn lode. The stopes on the branches continue as reported on, and producing 1 ton of lead per fathom.

BILLINS.—F. Evans, Oct. 12: The engine-shaftmen having finished fixing plunger in the 70 will resume sinking below that level at once. The 70 east is without change, at present poor. In the 70 west the lode is 1¼ ft. wide, made up of clay and spar, with tumblers of lead. In the rise behind this end the lode is worth 2¼ tons per fm., and from 3 to 4 ft. wide. We are also sinking a winze on this rise from the level over, and expect to hole in about a week. Our sale to-morrow will be 15 tons of lead ore, and the prospects are very encouraging for the future.

BOSCAWEN.—J. Edwards, E. Richards, Oct. 8: The lode in the 80, driving west of Hunter's shaft, is 15 in. wide, unproductive; the same remark applies to the 70, west of said shaft. The lode in the sump-winze, sinking below the 70, is 18 in. wide, worth 15*l.* per fm. for copper ore. The lode in No. 2 winze, sinking below the 70, is 1 ft. wide, producing stones of copper ore, but not to value. The lode in the 70, driving east of Hunter's shaft, is 2 ft. wide, producing rich stones of copper ore. The south lode is not yet intersected in the 80 or 70 fm. level cross-cuts, south from Hunter's and Kitelee's shafts. The stope in back of the 70, west of Hunter's shaft, is worth 20*l.* per fm. Boscawen lode in the 30, driving east of caunter shaft, is 6 inches wide, producing stones of copper ore, but not sufficient to value. The tin lode in the 14, driving east of Kitelee's shaft, is 15 in. wide, producing stamping work for tin. The tribute pitches throughout the mine are looking much the same as for some time past.

BOTELET.—J. Trevillion, Oct. 12: Since last report we have cut through the lode at the 26, and driven north on its course 5 fms.; it is 4 ft. wide, composed of quartz, mundic, and lead, worth of the latter 8 cwts. per fm.; in the same level south the lode is 2¼ ft. wide, producing good stones of lead. I am glad to say the lode has decidedly improved in character, and from present appearances it will open out a good level. North and south at the 16 the lode continues large and kindly, and yielding occasionally good stones of lead. The stope in the back is worth 6 cwts. of lead per fm. I hope to hole the rise to the adit level in the course of a week, which will improve the ventilation.

BOTTLE HILL.—J. Eddy, Oct. 11: Main Lode: We have nothing new to report on this week. The lode in the stopes, both east and west of new shaft, is still about 8 feet wide, and turning out about the same quality work as when reported on last week. We have commenced a cross-cut north from bottom of new shaft towards Blanchard's lode, and have now about 8 fms. further to drive, which I think will be accomplished by four men in about two months from this time. Judging from the work done by the ancients in the back of this lode, there can be no doubt that there must have been good returns of tin made from there. We shall see this lode by a cross-cut to the depth of 20 fms. from surface. We are now burning our tin, and shall get on with sampling as soon as possible. The water for drawing and stamping is still short.

BRONFLOYD.—T. Kemp, Oct. 6: Since the last general meeting we have communicated the winze from the 40 to the 52, west of engine-shaft, which has thoroughly ventilated the bottom part of the mine, and greatly facilitated our operations. The cross-cut has been opened north of winze by six men 6 fms. 1 ft. through the lode; the first 3 fathoms of this drivage proved to be of little value, but I am pleased to say the last 3 fathoms 1 foot has been exceedingly satisfactory, and will average quite 2 tons of lead ore per cubic fathom; the forebreast is looking just the same as when you were underground on Monday last, yielding 4 tons of ore per fathom; the lode altogether is of a most magnificent character. As instructed, I have put six men to open the lode east, and they are breaking excellent lead ore. Should the lode continue as it now is, when we have sufficiently opened it we shall be able to make large returns. About 5 fathoms from shaft, in this same level, we are driving a cross-cut north by four men to cut the south lode; we have opened 4 fathoms, in which we have passed through some strings of lead, and I hope in a few more fathoms driving we shall reach the ore. We have one stope working in the bottom of the 40, west of winze, by six men; part of the lode carried is yielding 1¼ ton of lead per fathom; lode rather stiff for progress. We have one stope working in the back of the 40, on the south part of the lode, by four men; lode yielding ½ ton of lead per fathom. I have let the eastern stope on tribute to two men for four months, at 9*l.* per ton; takers to pay all costs. I have set the engine-shaft to nine men to fix cistern and lifts, and to sink 11 fathoms perpendicular, and to make everything complete, at the same price as the last shaft bargain. I hope to sample during the next three months 100 tons of good quality ore, at a cost of about 200*l.* per month. Bronfloyd sold 30 tons lead ore, at 14*l.* 11*s.*, to Mining Company of Ireland, on Sept. 30.

BRYNTAIL.—James Roach, Oct. 13: The 30 fm. level is extended east of cross-cut 2 fms. 4 ft., which is firmly secured with timber; to-day the lode presents strong spots of lead ore, with good indications for improvement. The 30 west is driven 3 fms.; this is also secured with timber; here we are not far enough west to meet with the shoots of ore passed through in the 20, but we shall not be long getting there; at present we are driving rapidly. In the 20 east we are cross-cutting from the north to the south part of the lode; hitherto it has been hard, but it is now much easier for driving, and showing good indications for a deposit of lead. I hope to see a great deal more of this next week. In the 20 west, on the north part of the lode, where we have lately been driving and stoping, we have some very good branches of solid ore in the bottom of the level, nearly 1 foot wide. We shall now clear out the stuff, and make preparations for sinking on the same.

BULLER AND BASSET UNITED.—J. Rule, Oct. 13: There is no particular change to notice in the mine since last week's report. The lode at the 60 never looked better than at present. The lode at the 80 is as last reported.

CAPE CORNWALL.—R. P. Goldsworthy, Oct. 12: Saturday last was our pay and setting-day, which went of well. We set the following bargains:—The adit end to drive south on Wheal Owl lode, by two men, at 55*s.* per fm.; the lode is 15 in. wide, producing excellent stones of tin. The shaft to sink from the surface on Wheal Owl lode, by two men, at 3*l.* per fm. We hope to continue the shaft below the adit to a depth of 30 or 40 fms. to prove the value of the lode; from the appearance of the lode in the adit we believe it will prove highly productive in depth. We are pushing on the forking of the old mine with all possible speed. Our shaftmen are following down the water with the skip-road.

CARADON CONSOLS.—W. Rich, Oct. 11: We have broken stones of very rich ore in cutting through the branch at the 80 cross-cut south; I have put a pare of men to open on it away from the cross-course as quickly as possible. In the meantime we are urging on the cross-cut without delay. The engine lode in the winze is still large and well defined, and carries spots of ore. There is no alteration to notice in the north winze sinking in the cross-course.

CEFN BRWYNO.—Oct. 11: The lode at the 92, west of cross-cut, at Taylor's shaft, is 5 ft. wide, of a promising appearance, now yielding 1 ton of lead ore per fm. The same level, going west, is in a lode 4 ft. wide, yielding a little ore, but not to value at present. The lode at the 80, east of shaft, is 2 ft. wide, yielding good stones of lead ore, but not so good as last reported; lode a little disordered. The same level west is in a lode 5 ft. wide, yielding good saving work. The lode in the 56, or deep adit level, going west of shaft, is 3 ft. wide, showing strong spots of lead ore, but not to value at present, although a very kindly-looking lode. The winze sinking below the 68, 70 fms. west of shaft, is in a lode 6 ft. wide, yielding 14 cwts. of ore per fm.; ground hard for exploring. All other points in the mine are without alteration since last report.

CLARA UNITED.—J. Lester, Oct. 6: Since the last quarterly meeting the principal operations have been confined to the sinking of the engine-shaft at Llywernog, perpendicularly from below the 40, now down 9 fathoms; I expect in about ten days to finish the contract to 50 fathoms from surface. The shaft was sunk in the country (*i.e.*, not in the lode) until yesterday, when we came upon the north wall of what I suppose to be the south lode; so far as exposed it presents a kindly appearance, and contains a fair mixture of lead ore. Should this prove to be the south lode, it has come in contact with the shaft a little sooner than I expected; there can be but a short distance at the bottom of the engine-shaft to the main lode, when probably a junction of these two will take place, and a deposit of lead ore may shortly be expected to be met with. This we shall soon be able to prove when the sinking is completed. At Dolwen, we have cut down the sides, widened the old adit level, and laid down 90 fathoms of iron rails to form a tram-road, to facilitate the speedy discharge of stuff. On July 9, I set a contract to six men, to continue this adit west towards the engine-shaft, at 5*l.* per fathom—estimated length to drive 26 fathoms. Up to the present date 15 fathoms have been driven, the last 6 fathoms being on the course of the lode, which is about 6 feet wide, intermixed with mundic and lead ore, not yet sufficient to value, but of a very promising character. We have also put up a rise from this adit to surface for ventilation, which I hope will give sufficient air to carry the work on to the engine-shaft.

— Oct. 12: We have not yet cut through the lode in the bottom of the engine-shaft, there being so much water it is bad for progress; so far it is looking very promising, and yielding sufficient ore to pay for dressing.

CLOWANCE WOOD.—E. Chegwin, Oct. 12: We have set the engine-shaft to sink below the adit, by nine men, at 4*l.* per fm., and the ground favourable for sinking. The engine is still working well, and the water very little in the shaft.

CONNORREE.—Capt. Bishop, Oct. 8: The deep adit is still of the same character, and yielding good lumps of sulphur ore. The 74, east of engine-shaft, is much the same as last week, and looks well for a good yield of lump sulphur and coppery sulphur smalls, in connection with silver. The 64, west of engine-shaft, is still poor for ore. The 54, west of engine-shaft, is much the same as last week, and the yield is good class copper ore. The 45, west of engine-shaft, on the whole, is looking well for copper and sulphur. The lode in the 10, east of Kempson's shaft, is still looking well for copper ore, and is producing a good class ore. In the 18 fm. level ends, east and west of Field's shaft, the lode is very wide, and yielding about the usual quantity and quality of copper and sulphur ore. In the 10 cross-cut, south of Tracey's shaft, there is no marked change for the week. In the 20 cross-cut, south of new shaft, the rock is hard, and progress slow. In the stopes on great copper and other lodes the yield is much the same as last week.

CORNUBIA TIN.—Oct. 10: Our monthly setting took place on Friday last, and was as follows:—The 70 east, on No. 6 lode, to drive by six men, at 4*l.* 10*s.* per fm.; the lode is 6 ft. wide, looking very well. A stope in back of this level set to eight men, for two months, at 35*s.* per fathom, yielding very well. A stope in back of the 70 west, on No. 6 lode, to six men, at 38*s.* per fm., worth fully 8*l.* per fm. The 70 east, on No. 5 lode, by six men, at 90*s.* per fm.; the lode is 2 ft. wide, yielding good work for tin. The back of ditto is stoping by four men, at 32*s.* per fm.; turning out very good work. The new, or No. 2 lode, in the 60 cross-cut south, is worth fully 10*l.* per fm.; set to drive east and west by four men, at 67*s.* 6*d.* per fm. At Knight's, or western end of the mine, in the 30, No. 1 lode is set to stope by four men, at 16*s.* per fm.; from the appearance of the lode gone down in the bottom of the 20 we may shortly expect good returns here. A stope in the 20 to two men, at 11*s.* per fm., yielding fair stamps' work, with very good stones of tin occasionally. All the filling and landing on the mine to four men, for one month, at 12*l.* The wheeling for ditto, 11*l.*; spalling, ditto, 9*l.* We have also set a cross-cut to drive south of flat-rod shaft, in the 40, by two men, at 5*l.* per fm. We sold on Friday last over 4½ tons of tin for the month, which gave us about 30*l.* over our costs. We expect a good batch of tin for our next sale, as the mine is looking better than at any former period.

CRENVER AND WHEAL ABRAHAM UNITED.—J. Vivian, Oct. 13: At Vivian's engine, in Oatfield, the engineers have fixed all the heavy part of the 90-inch cylinder engine in position, and a part of this staff is now lifting the heavy parts of the No. 1 30-in. winding-engine and capstan at this shaft in its position. The boiler building is carried on rapidly. Our smithy, carpenters, and engineers' shops, with steam-hammer, saw-bench, turning and boring-machines are all in order for working. At Wheal Abraham, or middle sump, the 80-in. cylinder engine is nearly all in, with balance-bob fixed. The timbermen are putting in skip-roads, ladders, &c.; the pitmen cutting bearer-holes, cistern-plats, &c. The masons are building whim-house and capstan-stand for No. 2 30-in. winding-engine. At Thomas's the masons are building stack of 70-inch engine, and No. 3 steam-winding engine-house and stack. Here our pitmen are putting in ladder-road, cutting cistern-plat, bearer-holes, &c. We are also busily engaged putting skip-roads in the different drawing-shafts.

CUDDRA.—F. Puckey, E. Dunstan, Oct. 13: Walker's shaft is sunk the 105, and the ground is favourable for sinking. In the 105 end, west of the shaft, the lode is still very large, producing good work for tin, worth 25*l.* per fathom. In the same level, east of the cross-cut, the lode is 5 feet wide, worth 15*l.* per fathom. The lode in the stopes in back of this level is without alteration, still 9 feet wide, worth 16*l.* per fathom. In the 90 west, on the south lode, the lode is 2 feet wide, composed of peach, capel, and iron, producing good stones of tin, but not sufficient to value. In cutting out the lode between the 75 end west it is full 5 feet wide, saving work for tin, worth 8*l.* per fm.; in the stopes in back of this level no lode has been taken down since our last week's report. The same remark will apply to the stopes in back of the 60.

CWM ERFIN.—John Williams, Oct. 11: The lode in the rise in the back of the 20, 90 fathoms east of the boundary, is 1 yard wide, composed of clay-slate, quartz, and spots of lead ore, but not to value. The lode in the stopes in the back of this level, 50 fms. east of the boundary, is 2 ft. wide, and worth 8 cwts. of lead ore per fathom. The lode in the stopes in the back of the same level, 40 fathoms east of the boundary, is ft. wide, and will turn out 12 cwts. of lead ore per fathom. The stopes in the back of the same level, 30 fathoms east of the boundary, have slightly improved; the lode is 3 feet wide, and worth 1 ton of lead ore per fathom. The 10, going east of the boundary, continues to open out good stoping ground; the lode in the present end is 5 feet wide, and worth 1¼ ton of lead ore per fathom. We have three stopes in course of working over the back of the 10, the lode varying from 3 to 6 ft. wide, and will turn out on an average 1 ton of lead ore per fathom. The two stopes over the back of the same level, and known in my last report as being 5 fathoms east of the boundary, and 90 fathoms east of the cross-cut, are exhausted; ground taken away to the bottom of the deep adit level. We have intersected the cross-course in the deep adit level going east of the boundary, and have suspended the driving for the present, and have put the men to sink on the rise below for ventilation; we expect to effect a communication in about three weeks from this time. The lode in the winze is 4 feet wide, and worth 1¼ ton of lead ore per fathom. The lode in the stope over the back of this level, 10 fathoms east of the boundary, is 1 yard wide, and worth from ¾ to 1 ton of lead ore per fathom. The lode in the stopes in the back of the same level, 50 fathoms east of the cross-cut, is 4 feet wide, and worth 15 cwts. of lead ore per fathom. The lode in the 10, going west of the engine-shaft, is ½ yard wide, containing carbonate of lime, killas, and spots of lead ore, but not to value. The lode in the shallow adit level, going east of the cross-cut, has been disordered by soft ground, which came in from the south; the last 4 ft. driven has been through unproductive ground, but to-day the lode again shows symptoms of improvement. In the tribute department we have no alteration to notice.

DARREN.—R. Williams, Oct. 12: We are making good progress in driving towards the shaft in the 15, for the purpose of opening out the lode for stoping; we are not driving on it, but by its side, for greater dispatch, as the lode is much harder than the side rock; we shall shortly be in a good position in this level. The stope in the 15 produces work of about the same quantity as for same time past. We have not been drawing anything to surface for the last fortnight, having had to remodel our shaft before we could properly work the machine-kibble; this matter is now about complete, and we purpose drawing with the machine to-morrow. All the other matters are proceeding in the usual way.

DEVON AND CORNWALL UNITED.—T. Neill, Oct. 11: The lode in the 12 east is now worth 5 tons of ore per fm. The stope above is worth 4 tons per fm.—William and Mary: The lode in the 22 east is worth 5 tons per fm. The stope above is worth 5 tons per fm. The 10 east is worth 7 tons per fm. The lode in the winze sinking below the deep adit level, east of the 10 end, is worth from 3 to 4 tons of ore per fm. We are making good progress in sinking the whim-shaft.

DEVON COPPER.—T. Neill, Oct. 11: In the adit level, east of cross-cut, the men are breaking some good ore, and the lode is looking very promising. The part of the lode the shaft is sinking on is producing capel, gossan, mundic, and copper ore.

EAST BOTTLE HILL.—J. Eddy, Oct. 13: We are sinking our air-shaft by nine men in order to hole to the adit level as soon as possible. We have a little water in the shaft, but nothing as yet to notice. We are driving our adit level, and making good progress.

EAST BROOKWOOD.—T. Bennett, Oct. 13: The engine-shaft is down 6 fms. 4 ft. below the 10. The men are at present making fair progress in sinking. The weather has been in our favour lately, as it has shown a decrease of water in the bottom of the shaft; and having an ample supply of top water to work our machinery, we are enabled to go on with our sinking far better than heretofore. The machinery is working well.

EAST CARADON.—James Seccombe, Oct. 10: Williams's shaft is down to the required depth for a 90 fm. level. The shaftmen are engaged sinking below the level for fork, and will soon commence cutting plat. The caunter lode, in the 80 east, is worth 10*l.* per fm.; west in the same level, 15*l.*; the 70 east is worth 20*l.*; the 60 east is unproductive. The new lode, in the 80 east, is worth 15*l.*, and west 7*l.*; the 60 west is worth 7*l.* The south lode, in the 70 east, is worth 6*l.* The 80 cross-cut is driven 14¼ fms. towards the south lode; we calculate to intersect it in from 2 to 3 fms. further driving. The ground has been rather slow for progress. Seccombe's shaft is down below the 35 fm. level 13½ fms.; the ground is not so speedy for sinking as it has been. Our progress hitherto has been very good. We have about 7 fms. more to sink to make us equal to the 50 perpendicular from Williams's shaft, which we purpose doing before cutting into the lode. I consider our chances of discoveries for the future are very good.

EAST CARN BREA.—Thos. Glanville, J. Scholar, Oct. 12: No. 3 Lode: In the 60 west the lode is producing 2 tons of ore per fathom. In the winze below the 60 the lode is producing 4 tons of ore per fathom.—New Lode: In the 30, east of the western shaft, the lode is producing 3 tons of ore per fathom. In the 26 west the lode is producing 1 ton of ore per fathom. In the stopes in the back of the 50 the lode is producing 3 tons of ore per fathom.—No. 4 Lode: In the 50 west the lode is producing 3 tons of ore per fathom.—Tutwork Setting: The old engine-shaft to sink below the 70, by nine men, at 25*l.* per fathom. The 70 cross-cut, to drive south of the old engine-shaft, by six men, at 7*l.* per fathom. The 60, to drive east of the cross-course on No. 3 lode, by six men, at 6*l.* per fathom. The 60 to drive west of the cross-course, on No. 3 lode, by four men, at 3*l.* per fathom. The 50 to drive west on No. 4 lode, by four men, at 7*l.* per fathom. The 50 fm. level cross-cut to drive south, by four men, at 6*l.* per fathom. The 50 to drive west on the new lode, by four men, at 5*l.* 10*s.* per fathom. The stopes in the back of the 50, on the new lode, by six men, at 1*l.* 10*s.* per fathom. The stopes in the back of the 50, on the new lode, by four men, at 1*l.* 10*s.* per fathom. The winze to sink below the 40, on No. 3 lode, by four men, at 7*l.* per fathom. The 30 to drive east of the western shaft, on new lode, by four men, at 3*l.* 10*s.* per fathom. The winze to sink below the 30, by four men, at 4*l.* 10*s.* per fathom. The 26 to drive west on the new lode, by four men, at 5*l.* per fathom. The 26 to drive east of Thomas's shaft, by two men, at 8*l.* per fathom. Buckley's shaft to sink by six men, at 12*l.* per fathom. The winze to sink below the 60, by four men, at 3*l.* per fathom.

EAST CHIVERTON.—J. Nancarrow, Oct. 11: The shaftmen are making good progress in sinking the engine-shaft, and the lode the same as last reported. In the south lode in the eastern end there is no change. In the east end, on north lode, there is no change since last report. In the north shaft the lode is looking more promising than last week, as it appears to form itself more compact and regular again.

EAST GREAT WORK.—J. Lean, Oct. 12: Saturday last being our setting-day, the following pargains were let:—The shaftmen to cut a plat in the 10; set to cut and secure for 7*l.*; as soon as this is completed, they will commence sinking the engine-shaft; set to sink deep enough for bearers and cistern, at 10*l.* per fm., to eight men. The 10 to drive east on the Great Work lode, by four men, at 45*s.* per fm.; 3 fms. stent are cut The caunter lode, in the present end, is 2 feet wide, producing stones of copper ore; the same level west is set at 4*l.* per fm.; 2 fms. stent; the lode is split into strings, producing stones of copper and tin; there is more lode to the north of this level, when the present contract is completed we shall drive north to intersect it. The 8 fm. level is set to drive east of the Moor shaft, by two men, at 30*s.* per fm.; saving lode for copper for 15 in. wide. A stope in back of the 8, west of Moor shaft, by two men, at 20*s.* per fm., producing ¾ ton of ore per fathom. No time will be lost in getting the new pit work, and fixing the same.

EAST GUNNIS LAKE AND SOUTH BEDFORD.—J. Phillips, Oct. 13: In putting up the rise in back of the deep adit we find the main part of the lode standing south, and have taken it down from the rise to the present end, where we find it greatly improved; this portion of the lode is 3 ft. wide, composed of fluor-spar, prian, and very rich coated yellow ore, worth 16*l.* per fm. The tribute pitches are looking well, and the men making good wages.

EAST JANE.—T. Hodge, Oct. 13: The lode in the 26 fm. level south is large, and producing good work for lead, opening ground that will work at a moderate tribute. We have passed through a long piece of productive ground in this level, which can be taken away to good advantage as soon as the 40-in. engine goes to work, which will be got on with as fast as possible. The engineers are making fair progress with the erection of the engine: all the heavy parts are in. The boiler is also fixed in its place. The masons completed the stack yesterday, and are now engaged about the boiler-house. We shall sample a parcel of lead on Thursday next, about 10 tons.

EAST PROVIDENCE.—T. Uren, W. White, Oct. 12: Wilson's shaft is sinking below the 60 by twelve men, at 16*l.* per fathom. We expect to communicate this shaft with the 70 in five or six weeks. In the 70, south from Boorman's shaft, on the flookan, we have cut a branch, which is producing stones of tin. To-day we have put the men to drive east on it to prove its value, and also to intersect Bamfield's lode. The 60, east of junction, on Bamfield's lode, is driving by six men, at 8*l.* per fathom; the lode in this end is not so good as it was last week; now worth 8*l.* per fm. The winze sinking below the 60 east, on Bamfield's lode, is worth 20*l.* per fathom, and is being sunk by nine men by 15*l.* per fathom. In the 50 cross-cut, south from Boorman's, the ground is changing for the better. We think we are getting near Bamfield's lode; this end is being driven by six men, at 10*l.* per fathom.

EAST ROSEWARNE.—J. James, Oct. 13: Hallett's shaft is without change to notice. In the 75 east the lode is 18 in. wide, producing rich stones of ore, opening tribute ground. In the 75 west the lode is 18 in. wide, rather disordered at present, but producing good ore, worth about 9*l.* per fm. In King's shaft the lode is 1 ft. wide, worth quite 20*l.* per fm. We shall have to suspend the sinking for a few days, to fix standing-lift. In the 75 west of King's the lode is 2 ft. wide, worth 15*l.* per fm. The stopes throughout the mine are much as last reported. We calculate to sample, on the 25th inst., 150 to 160 tons of good quality ore.

EAST TRESKERBY.—John Nancarrow, Oct. 10: There is scarcely a lode broken in any of the places since last reported, and consequently no alteration. Everything is being pushed on as usual.

EAST WHEAL ELLEN.—Capts. Garland and Corfield, Oct. 12: There is no change in any of our bargains since last week. The winze sinking below the shallow adit level still looks very promising, and the lode in the stope in bottom of the deep adit level is also looking very well.

EAST WHEAL GRENVILLE.—George R. Odgers, W. Bennetts, Oct. 12: No lode has been taken down at the engine-shaft sinking below the 75. The lode in the 75 east is 2 ft. wide, sprigged with ore, and looking more promising. The lode in the 75 west is nearly 2 ft. wide, composed of quartz, with a little ore and mundic; the lode is getting more vughy, and which contains black ore and prian; we, therefore, expect a change very shortly; the ground by the side of it is indicating the same. The lode in the 65 west is 1 ft. wide, producing 1¼ ton to the fathom. The stopes are looking much the same as before. The lode in the 55 west is large, and yielding good work for tin, worth 30*l.* per fm. The lode in the rise above this level is large, and yielding splendid work for tin, worth 35*l.* per fm. The lode in the 45 east is 3 ft. wide, producing ore and tin, worth 6*l.* per fm. The lode in the winze sinking below the 45 west is 15 in. wide, producing ore and tin.

EAST WHEAL LOVELL.—J. Burgan, Oct. 13: The new shaft is still in hand by the full number of men, and every effort is being made to facilitate its completion. The south lode at the 28 has fallen off in value since my last report. The shaft at the top of the field has been sunk 9 fathoms, where we have met with water, which prevents any further sinking until flat-rods are fixed and worked by our pumping-engine for the purpose of draining this part of the mine.

EAST WHEAL RUSSELL.—John Goldsworthy, Oct. 12: Homersham's shaft is in regular course of sinking below the 130; the ground is favourable, and good progress is being made. In the 130 cross-cut, driving north, the ground continues hard, therefore the progress is rather slow at present; the elvan is not as yet reached. The part of the lode being carried in the 120, west of Maynard's cross-cut, is 4½ feet wide, composed of capel, quartz, and prian, and produces saving work for dressing. The lode in the 120 east is 2½ feet wide, composed of capel, quartz, prian, and a little black oxide of copper ore. The lode in the 77, west of Northey's cross-cut, is 3 feet wide, producing saving work. The lode in the 45 east is 4 feet wide, composed of capel, flookan, quartz, and mundic, and produces a little yellow copper ore. The ground in the 88 cross-cut, driving north-west of Hitchins's engine-shaft, is favourable, and good progress is being made.

— James Richards, Oct. 13: My opinion as to the success of the 130 fathom level remains the same as ever. It is true we expected to have met with the lode by this time, and the reason we have not done so is that it must have gone more downright than in the upper levels, a sign by no means unfavourable in most instances. We are pushing on as fast as we can, and I hope soon to have to report upon a good lode in this level.

EAST WHEAL TOLGUS.—Oct. 10: The lode in the end at the 34, east of John's shaft, is 2 ft. wide, consisting of spar, peach, and killas. The ground in the 34 fm. level cross-cut south is hard.—New Lode: The lode in the adit end, east of new shaft, is 2½ ft. wide, composed of spar, peach, gossan, mundic, and killas. The men west of new shaft are driving north on the cross-course in search of the lode, which we think is heaved in that direction. The ground in the adit cross-cut is easy for driving.

EAST WHEAL VOR.—J. Pollard, Oct. 12: The report of the above mine is as follows:—Old Wheal Vor Main Lode: At the engine-shaft, sinking below the 70, we have a very strong-looking lode, 4 feet wide, composed principally of mundic, blende, and peach, tinny throughout; worth, for length of shaft, 7l. per fathom. In the 70, driving east, the lode is 4 ft. wide, yielding a little tin, but insufficient to value. In the 70, driving west, the lode is 5 feet wide, producing tinny work. The 60 east is at present unproductive. In the 60 and 50 west the lode is 1 foot wide, the former yielding occasional stones of tin, and the latter fair stamping work.—Smith's Lode: In the 16, driving east, the lode is 4 in. wide, and west 9 in. wide, both yielding stamping work. We expect to communicate Vivian's shaft to the rise in about a week from this date. We shall send a a parcel of good quality ore to the smelters previous to our next pay and setting-day.

FRANK MILLS.—J. P. Nicholls, J. Cornish, Oct. 12: The engine-shaft is now rather more than 14½ fms. under the 100, and the ground continues to present quite as favourable indications for the production of large quantities of lead ore as we go down. There is no change in the general appearance of the ground in the 100 fm. level rise, being still rather spare for progress. We have not taken down any lode in the winze sinking in the bottom of the 84 since our last report; it is being left standing to the east, we shall make every effort to effect a communication here as soon as possible. The wide stope in the back of the 60 north is looking much the same as stated in our last, and yielding 2 tons of lead ore per fm.; the stope adjoining to the south is also yielding fully 2 tons per fm. The tribute pitches continue to look very well indeed, and are yielding large quantities of lead ore. All our operations in connection with the mine throughout are progressing exceedingly well.

GLASGOW CARADON.—W. Taylor, Oct. 11: On Saturday was the pay and setting. All the bargains re-set as usual. The lode in the 52 west is not looking so well, now worth from 12l. to 15l. per fm.; this lode is very changable, and I hope it will improve again soon. The stopes throughout the mine are looking just as usual, and turning out fair quantities of ore. The cross-cut in the 65 is getting very near the lode, and we are pushing on to it as fast as possible. We sample to-day (computed) about 160 tons of ore, for sale on the 27th. We hope the quality is a little better than the last.

GOLCH HILL.—Oct. 12: The rise in back of the 60 fm. level is producing 16 cwts. of lead per fathom. The stope in back of the same level is worth 8 cwts. per fm. The end over the back of the 60 is improving, a leader of lead coming in, which is opening wider as we drive on it.

GREAT BRIGAN.—J. Tredinnick, Oct. 12: In the 57 cross-cut, south of Highburrow shaft, we have intersected a lode underlying north, which is letting out a quantity of water, but very little has been done on it. Instead of driving the cross-cut south, I think our better plan will be to drive east on this lode towards the cross-course, and then drive south on the same, to cut the other lode east of cross-course, where I have no doubt they will be found more productive than they have been to the west, and the ground more favourable for driving. In the end driving east of the cross-cut, in the 83, the lode produces a little ore, but not to value. In the winze sinking below the 33, east of Highburrow shaft, on Brigan lode, the lode looks kindly, and produces good stones of ore. No change in the 20 cross-cut, east of Ennor's shaft. In the winze sinking below the 20, on the south, the lode has made a splice, and at present poor. In the end driving east in the deep adit level the lode yields a little ore, but rather disordered, being so near the slide. In the end west of the new shaft, in the deep adit level, the ground is moderate for driving. We have resumed the sinking of the new shaft below the deep adit, and anticipate to cut the lode about the 10, where I have every reason to believe it will be found productive. I have put a pare of men to sink a winze below the shallow adit level west of the new shaft, to come down in the deep adit for ventilation.

GREAT LAXEY.—R. Rowe, Oct. 11: Since the report to the general meeting our various operations have proceeded satisfactorily. In the north ground no change has occurred in the 210 and 200 drivings. The lode in the 190 has improved; it is 6 ft. wide, worth fully 80l. per fm. The 180 end is quite as good as last reported, worth from 60l. to 70l. per fm. In the roof of the 165 the stopes continue to look well; and, taking their whole length, now over 20 fms., I never saw them in a better position, or with better prospects for yielding an almost unlimited quantity of ore. The sump in the 155, sinking down upon the before-named stopes, is worth 200l. per fm. The 145, driving north, on the east lode, is opening out favourably. The lode is increasing in size, and of about equal value as last reported. In the 130 the lode has been small, but is now widening, and beginning to yield saving stuff for lead and jack. The whole of the productive ground lies ahead of this end. No change in the 120 cross-cut. Within the last three or four days the 110 end driving north, which since the meeting had been very productive, has fallen off in value, though not in size. The end, as it now stands, is worth 80l. per fm. This falling off in value I believe to be only very temporary, and am satisfied, as will appear, that we have valuable ground yet before us. The stopes in the roof fully sustain their value—200l. per fm. At Dumbells the prosperts altogether have improved since the meeting. The new 70, north from the sump, in all about 5 fms. long, continues to open out a valuable lode, whicn will average 100l. per fm.; this lavel is in advance of all others driving north, in wholly new ground, and, therefore, of the utmost value and importance. From this we infer that, although the 110 has already passed through a fine run of ore ground, there is an excellent prospect before it; and, indeed, that the extreme north end of the mine will become increasingly valuable. Agneish shaft is sunk 12½ fathoms below the day level; the ground and lode remain without any change. We are busily engaged with the erection of the wheel upon this shaft. In the drivings south there is no improvement in the 190. The 165 has a large and very productive lode for jack and copper—a bad mixture, but at present we are passing through cavities and broken ground, which will, we expect, lead to some further change shortly. The 155 end has a large and valuable lode for lead and copper, 6 ft. wide, worth 60l. per fm. The copper stopes above this level continue without any alteration of sufficient importance to notice. The stopes in the 60 are yielding jack and lead, altogether above our expectations, especially in the roof, where, in places, the lode is from 7 to 8 ft. wide, and worth 150l. per fm. Nothing new at Glenroy or Snafell.

GREAT NORTH DOWNS.—J. W. Crase, W. Jenkin, Oct. 12: There is no alteration at Vivian's or the western part of the mine worthy of remark since last report; the same remark will apply to Pendarve's lode, in Rule's shaft, and also the 57 ends, driving east and west of cross-cuts on said lode. At Sleggan's shaft, sinking below the 62 fm. level, we have met with water, and are, consequently, obliged to suspend the sinking for the present. This shaft is now sunk to the 70 fm. level, where we shall commence driving east and west on a lode worth 12l. per fathom; from the fact of there not having been any level driven, either east or west of this shaft, below the 40 fathom level, we think we have great reason to hope we shall, by extending these levels, open a good piece of ore ground, which will be made available in a short time. The lode in the 57 fm. level, driving west of King's shaft, is worth 6l. per fathom. About 5 fms. east of said end we have commenced sinking a winze, where the lode is worth 12l. per fathom. Nothing else new during the past week. We have sampled to-day 173 tons of copper ore.

GREAT SOUTH CHIVERTON.—J. Nancarrow, J. George, Oct. 10: The west end is still in unsettled ground, and is now 5 fms. from shaft; The lode contains good gossan, with stones of blende, and has a very promising appearance. The east end is in killas; in both we are making good progress; the water in each is just as usual, and we have to close timber both ends, as the ground is heavy. The walls of the smith's shop are completed, and the roof is now being put on.

GREAT SOUTH TOLGUS.—J. Daw, Oct. 12: Friday last was our setting-day. In the 166 fm. level, west of Lyle's shaft, the lode is 2 ft. wide, producing tinstuff of low quality; driving by three men and three boys, at 4l. per fathom. In the 154 fm. level, east of cross cut, the lode is 1½ ft. wide, producing a litte copper ore, but not enough to value; driving by four men, at 3l. 10s. per fathom. In the 154 fm. level, west of cross-cut, the lode is 2 ft. wide, producing 2 tons of ore per fathom; driving by six men, at 5l. per fathom. In the rise in the back of this level the lode has not been so large during the past week; it is now 1 ft. wide, producing 1 ton of ore per fathom, and is likely to improve shortly; rising by four men, at 4l. per fathom. We have suspended the sinking of the winze below the 154 fm. level. In the 154 fm. level, west of Lyle's shaft, the lode is 5 ft. wide, worth 12l. per fathom; driving by four men, at 4l. per fathom. In the 140 fm. level cross-cut south we have not yet cut the tin lode; driving by four men, at 8l. per fathom. In the 140 fm. level, east of new shaft, the lode is small and unproductive; driving by four men, at 3l. 3s. per fathom. In the 125 fm. level, west of Lyle's shaft, the lode is 1½ ft. wide, producing some good stones of ore; driving by four men, at 4l. 15s. per fathom. In the 125 fm. level, east of new shaft, the lode is disordered by the cross-course, which is letting out a quantity of water; driving by three men and three boys, at 12l. per fathom. In the 112 fm. level cross-cut north we have just commenced driving east on a branch; driving by four men, at 4l. per fathom. In the 100 fm. level, east of Noel's shaft, the lode 1½ ft. wide, producing some very good copper ore; driving by four men, at 4l. per fathom. The tin stopes continue to look well. We sold yesterday 140 tons of tinstuff, which realised 301l. 13s. 8d.

GREAT WHEAL BADDERN.—John Jenkin, Oct. 8: Hill Brothers' Shaft: In the cross-cut driving north, in the 75, the ground is of much the same nature as when last reported—favourable; the men are driving weekly from 3 to 4 feet; the end being now in about 11 fathoms from shaft. In the stopes in the bottom of the 25, east of Buckley's, the lode is 7 ft. wide; the quality is not quite so good as has been reported. The stamping-engine has a full supply of tinstuff, and working well. We have erected a horse-whim at Tweedale's shaft, and shall commence drawing up tinstuff in the early part of next week.

GREAT WHEAL BUSY.—John Edwards, J. Petherick, J. Tredinnick, C. Rawden, Oct. 8: The elvan still continues in Harvey's engine-shaft, sinking below the 140. The lode in the 140, driving west of said shaft, is 1 ft. wide, producing a little tin, but not to value. No lode yet intersected at the 140 cross-cut, east of Harvey's engine-shaft. We have cut through the lode at Offord's (140), which is 5 ft. wide, and worth 45l. per fm. for tin and copper ore; we have commenced to drive east and west on its course by 12 men. The lode in the winze sinking below the 130, east of Harvey's engine-shaft, is 2½ ft. wide, worth 10l. per fm. for copper and tin. The lode in the winze sinking below the 130, east of Offord's shaft, is 6 ft. wide, worth 30l. per fm. There is no change to notice in the 130 end, east or west, since last reported. The lode in Mathew's shaft, sinking below the 110, is 5 ft. wide, producing rich stones of copper ore. The lode in the 110, driving east of said shaft, is 3 ft. wide, producing stamping work for tin. The lode in the 100, east of Matthew's shaft, is 4½ ft. wide, producing a little tin, but not sufficient to value. The lode in the 90, east of said shaft, is worth about 20l. per fm. for tin. The lode in the 80 east is still large, but unproductive.

GREAT WHEAL FORTUNE.—Joseph Vivian, Nicholas Miners, Thomas George, Oct. 13: The lode at Carnmeal engine-shaft, sinking below the 114, is improved, now producing rich stones of tin. A further improvement is anticipated. The 114, driving east, has not yet reached the point where the tin was met with in the level above (the 102). The lode in the 102, driving east, is 4 feet wide, producing stamping work. The stopes in the back of this level, west of winze, are set on tribute. The 102, driving west of Hoskin's flat-rod shaft, is 5 feet wide, producing stamping work. This end is very much improved in appearance since last reported, and more productive than the level above (the 90) at the same point. Hicks's skip-shaft is sunk 9½ fathoms below the 20. The lode in the bottom of the shaft is 6 feet wide, and of the same promising character as when last reported. The lode in the 20, driving west, is disordered by a cross-course.—Old Mine: We are making good progress in driving the cross-cut in the 95, north of Harvey's engine-shaft.—Blue Burrow Lode: The 95, driving east of cross-cut, is worth 6l. per fathom. The same level, driving west, is worth 12l. per fathom. The 60, driving east of Blue Burrow shaft, is worth 5l. per fathom. The 70, driving east of Harvey's engine-shaft, on the Conquer branches, is producing stamping work. The 60, driving east, on the middle branches, is worth 5l. per fm. No other change since last report.

GURLYN.—J. Curtis, J. Rees, Oct. 12: In the 50 end, east of flat-rod shaft, the lode is about 2 ft. wide, producing tinstuff of low quality. The 40 and 30 fathom levels are passing through a lode of the same character. We have resumed driving the 50 west, on Riche's lode, which in the course of a few fathoms will be under some good tin ground passed through in the 40. Our tribute department is without change.

GWYDYR PARK CONSOLS.—W. Smyth, Oct. 12: In Gwyn Llifion deep adit we are still driving through cross branches, from which we broke this week the best specimens of lead ore, with mundic and blende, I ever saw in the end; the branches are vughy, and the ground is still hard and troublesome for driving. No change in Gwydyr stopes or middle level since last reported. The dressing is going on as usual. I have no one yet to clear No. 10 shaft, but I expect to get somebody in a few days.

HALLENBEAGLE.—J. Edwards, E. Richards, Oct. 5: The engine shaftmen are progressing satisfactorily with fixing the pitwork. The lode in Stone's shaft, sinking below the 40, is 15 in. wide, worth 14l. per fm. for copper ore, suspended for the present in consequence of water; we shall resume the sinking as the water goes down. The north lode, at the eastern shaft, in the 36, is 9 in. wide, worth from 5l. to 7l. per fm. of copper ore; this shaft is now down to water, and shall commence to sink the same as the water goes down. We have let Stone's and eastern shafts to sink below the 36 and 40, on south lode. The tribute pitches throughout the mine are yielding their usual quantity of copper ore. We shall sample on Tuesday next from 100 to 200 tons of copper ore of good quality. The engineers are progressing satisfactorily with the erection of the pum ping-engine, and hope to get it to work by the end of the present month.

HARWOOD.—J. Race, Oct. 7: At our setting I set two men to rise from the level at Scar Head into the limestone; they have reached the limestone, and will cross-cut to the vein after getting a little higher up; this is not the same as we have in the level, and I expect ore in it; set at 60s. per fm. The end of the drift is very changeable, worth to-day ⅛ ton of ore per fm.; set to two men, at 50s. per fm. The stopes are set to two men, at 40s. per fm., worth ⅛ ton of ore per fm. Trough Low level is set to four men, at 110s. per fathom. The 10 tons of lead ore sold to Messrs. Shield and Dinning will be ready on October 13.

HAWKMOOR.—J. Richards, Oct. 11: In the cross-cut, driving north of No. 3 lode, we have intersected what, in all probability, is the No. 2 lode; it is about 1 ft. wide, of a very promising appearance, composed of quartz, mundic, fluor-spar, and spots of yellow copper ore, of good quality; we shall drive a short distance on its course to ascertain its general character, &c. In the back of this level the lode is of large size, from 2 to 3 ft. wide, composed of capel, peach, mundic, and good work for tin ore. The lode in the stopes in the back of the 25 fm. level is worth 1¼ ton of copper ore per fathom.

HINGSTON DOWN CONSOLS.—T. Richards, Oct. 12: In the 120, both east and west of Bailey's engine-shaft, the lode is improved, the eastern end being worth 40l. per fathom, and the western end 35l. per fm. In the 110 west the lode is also looking better on getting off from the influence of the cross-course, now worth 25l. per fm. There is no alteration in any other part of the mine.

KELLY BRAY.—G. Rowe, Oct. 6: The lode is still looking exceedingly well going east, worth 40l. per fm., and from present appearances likely to continue. I have been making the necessary preparations to run down a ventilating shaft, which I have great hopes will be of some importance. I shall not fail to inform you of any change in the lode at any time.

— G. Rowe, Oct. 12: There is no particular change in the appearance of the lode in the 70 east during the past week; the water still continues to flow very freely from the end. The ground in the 60 cross-cut is highly mineralised, and producing an increase of water as we approach the lode. The lode in bottom of the winze below the 25, east from the western shaft, is worth 40l. per fm. The lode in the end driving east from the winze is looking exceedingly healthy, being from 5 to 6 ft. wide, composed of quartz, capel, gossan, black oxide and yellow copper ore, worth full 30l. per fm.

LADY BERTHA.—Capts. Harpur and Metherell, Oct 10: In the new eastern shaft, sinking below the 41 east, we have just had a hole in the lode, where it is producing some very good stones of ore.

LANIVET.—J. Tregay, Oct. 8: Oulton's Shaft: In the 10 west the lode in the end is producing good stones of tin; in this level east we have cut a cross-course, and are now driving south to prove the south part of the lode. At Petrie's engine-shaft the men are making good progress in sinking. The lode in the shaft near the account-house is producing saving work for tin.

LONG RAKE.—F. Evans, Oct. 12: The lode at the engine-shaft is rather small at present, but the ground is improved for sinking. The 80 west is improved, worth ½ ton per fathom, and a promising lode. In the 80 east there is a large orey lode, which will work at a low tribute. In the 70 east the lode is large, worth 1 ton to the fathom, and pretty easy for driving. The 60 east has improved; the lode is 3 ft. wide, and will produce 1½ ton to the fathom. The pitches look pretty fair, and the mine presents better prospects for opening good lead ground than for some time past. We shall sell 30 tons of lead ore to-morrow.

MAUDLIN.—J. Tregay, Oct. 8: Old Mine: In the 70 west end the lode is underlying very flat, just as it did in the levels above before it cut the cross-course.—Coombe: No lode yet met with.

MINERA UNION.—W. T. Harris, Oct. 13: Brabner's Shaft: The lode in the 80 yard level is at present in a very disordered state, but producing occasionally stones of lead. The level south from top of the rise is worth 10 cwts. of lead per fm., and very promising. The pitches north and south of No. 2 winze are without alteration. The pitch in bottom of the level, north of No. 1 winze, is worth 1½ ton of lead per fm. The winze sinking below the 60 is now deep enough to commence the level towards the lead, which will be at once proceeded with, and I doubt not, in a few days, to have a fine course of lead.—Williams' Shaft: No alteration in this portion of the mine since last report.

MOLLAND.—T. Bennetts, Oct. 10: The lode in the winze below the 62 east has improved since last reported, it being now 4 feet wide—a very pretty, promising lode, which will produce from ½ ton to ¾ ton of grey ore per fathom, and presenting every appearance of an improving nature; this winze is now about 2½ fms. below the level, where a regular defined lode may be seen from top to bottom, averaging 3 feet wide, spotted with grey ore more or less. The lode in the stopes in back of the 42 east is 5 ft. wide, worth for the whole width 1½ ton of ore per fathom. The ore ground remaining here is an arch or end of ground about 4½ fathoms long and 4 or 5 fathoms high. The stopes in back of the north part of the lode, in the 32 east, are worth 1½ ton of ore per fathom, of moderate quality. The extent of the ore ground here cannot be accurately estimated, as the lode has taken horse and may hole on a great many fathoms, or run out to a wedge in course of a few fathoms. However, I am inclined to believe that a great many fathoms of ore ground may be found here which will pay for taking away; in the bottom of this level there is a good speculation for sinking a winze, as nothing has been seen below this level (which we have recently cleared and secured) for 30 fathoms in length, the 42 and 52 fm. levels not having been driven under it. The ore which we now have at surface I estimate at 40 tons, and 3 or 4 tons underground, which I expect will be sent to surface to-morrow, besides 10 tons or more of refuse ore now on surface.

NANT-Y-IAGO.—J. Roach, Oct. 8: The settings for October are as follows:—The 30 west by two men, at 10l. per fm., composed of lime, spots of lead, and blende; this, I believe, will improve; the level above is very kindly. In the 20 west two men are cutting down the lode standing by the side of the level; the forebreast is 8 ft. wide, containing lead and blende throughout, worth some 7l. per fm. The rise in back of the 20 is worth 10l. per fm. for lead and blende, price 40s. The stope in bottom of the 20 east to two men, at 55s. per fm., worth 5l. per fm. for lead. No. 1 stope, in bottom of the 10, west of shaft, to three men, at 60s., worth 4l. per fm. for lead. No. 2 stope, in bottom of the 10, west of the above, to two men, at 60s., worth 15l. per fm. for lead.

NANTY.—Oct. 10: The lode in the 10, above the deep adit, going north of boundary, is 4 ft. wide, containing spots of lead ore, but not to value. The lode in the deep adit level, going north of boundary, is 3 ft. wide, yielding a little ore at times, but not to value at present. Nothing of any importance has yet been met with in the cross-cut west near the present end of this level. The stopes at the different levels throughout the mine are yielding on an average 10 cwts. of lead ore per fm. Good progress is being made with the timbering and repairing the engine-shaft below the roadway level, and also for the sinking of the shaft below the deep adit. These points shall be pushed on with the utmost speed, in order to open out the mine in depth. The masons are getting on well with the engine-house, and all other surface work is going on regularly.

NETHER HEARTH.—W. Vipond, Oct. 8: We continue to take hold of the vein as we drive the level, and shall soon have the level all in the vein; it has so much increased. We only see it yet in the hazle under the limestone; it will be necessary to rise by-and-bye to see if it be productive above. Nothing new in the drift from old shaft.

NEW BIRCH TOR AND VITIFER.—Captains Skewis, Trewarthen, and Symons, Oct. 11: Hambly Shaft, main lode, 48 fathoms west, is worth 6l. per fathom. In the 36 west the lode is large, yielding work for tin. In the winze sinking under this level no lode has been taken down during the week, ground favourable for sinking. In the 12 the lode is 1 foot wide, and of a very promising appearance. The north lode, in the 48 east is worth 5l. per fathom, ground more favourable for driving. The 36 is worth 3l. per fathom; in the winze sinking under this level the lode is producing a little tin, but not to value. The 12 is worth 8l. per fathom. In the winse sinking behind this end no lode taken down since last reported. At the new whim-shaft the lode is worth 12l. per fathom. At Lance's shaft the men have been engaged putting in bearers, cistern, fixing lift, &c.; this will be comp'eted in the course of a few days, and the sinking of the shaft again resumed.

NEW CROW HILL.—Wm. Trelease, Oct. 11: We have taken out the broken H-piece and put in a new one. The water is in fork to the 55, and we are clearing the levels, &c. The top water is, however, from the springs not having yet broken, short again; but we have arranged with the miller for part of his stream, and I hope we shall soon have the water in fork in bottom, or the 70. The new water-wheel is completed at the Louisa engine-shaft, and when the mason has finished the bob-pit, &c., we shall be in readiness to drop the lift. Masons and carpenters are not easily to be had in this neighbourhood, which has greatly impeded our progress.

NEW EAST RUSSELL.—J. Gifford, Oct. 11: The new engine-shaft is down 13 fms. and ground favourable for sinking, with no water as yet.

NEW PEMBROKE.—F. Puckey, J. Puckey, Oct. 10: The shaftmen have completed casing and dividing the engine-shaft, cutting the plat, &c., at the 60, and have commenced driving the cross-cut north at that level by six men, at 4l. per fm. We have also set the 60 cross-cut to drive south from the same shaft, by four men, at 3l. 5s. per fathom. In the 45, east of engine-shaft, on the north lode, the lode is 1½ ft. wide, composed of quartz, prian, and peach, producing a little tin, and looking very promising for a further improvement; driving by four men, at 4l. per fm. The lode in the rise in back of the same level is 1 ft. wide, of a very kindly character, producing some good work for tin, and worth 6l. per fm.; rising by four men, at 4l. 5s. per fm. In the 30, east of the shaft, the lode has increased in size, and now 2½ ft. wide, composed of quartz and peach, still letting out a large stream of water, and looking kindly for improvement; driving by two men, at 3l. 5s. per fm.

NEW ROSEWARNE.—E. George. W. Mitchell, Oct. 12: The lode in Bickford's shaft has fallen off in value since our report last week, now worth 30l. per fm. The lode in the 74, west of Bickford's shaft, is 5 ft. wide, worth 25l. per fm. for tin. The stope in the back of the 74 west is worth 35l. per fm. The lode in the 67 west is 2 ft. wide, producing a little tin and copper, but not to value. The stope in the back of the 67 west is worth 10l. per fm. The lode in the 58 west is 3 ft. wide, producing good stones of copper ore. The two stopes in the back of the 58, west of Bickford's shaft, are each worth 20l. per fm. for copper ore. The lode in the 46 west is still small. The lode in the 34 is 3 ft. wide, producing a little copper ore. We have holed Pool's shaft to the adit, and shall commence to sink below the adit in a few days.

NEW LAXEY.—R. Rowe, Oct. 12: The lode in the shaft, now sunk 6 fms. below the 60, continues to look very well, and is from 3 to 4 ft. wide, composed of kindly quartz and fine spar, and is worth about 2 tons of lead per fathom. A further improvement is now taking place in the regular run of the ore, being north as well as south. The 60 end continues to look well; the lode is decidedly more regular, and much stronger than in the levels above, about 3 ft. wide, and worth ½ ton of lead per fm., and promises to hold; this end is now driven 12 fms. south of the shaft, and for the whole distance we have had, particularly in the bottom, a productive lode. We have never had in the upper levels either so wide a lode or one so productive at the same distance from the shaft, whilst we have a very important additional mixture of blende with lead. In the stope in the roof of the 60 fm. level we have a good lode, worth over 1 ton of ore per fm. Last week we sold 15 tons of lead, at 14l. 15s. per ton.

NEW TRELEIGH.—S. Michell, Oct. 13: But little alteration has taken place in the mine with regard to our prospects since last week. In consequence of an increase of water in the winze sinking below the 80, west of Carr's engine-shaft, we are obliged to suspend the sinking, and effect a communication by rising against it in the 90, which we are making preparations to do. No lode taken down in the 80, driving west, for the week; the rise in the back of this level is worth 10l. per fm. The lode in the winze sinking below the 70 is at present disordered by a slide, which we shall get through in a day or two. We broke several barrowsful of ore in the 60, west of cross-course, yesterday; the lode is not out of the influence of the heave as yet, but looking very promising. Good progress is making in the new shaft sinking below the adit; the lode is composed of gossan, with good stones of ore.

NEW WHEAL MARTHA.—H. Rickard, G. Rickard, Oct. 13: The sumpmen are still engaged in cross-cutting through the lode at the 86, it having a kindly appearance, and worth for copper ore 9l. per fathom for the part already seen. The lode in the 7[illegible] west is producing good stones of ore. No alteration to notice in the 64 west since last week. The stopes in the bottom of the 52 still maintain their value for copper ore, 50l. per fm. The 40 west is approaching the cross-course, after which we anticipate a great improvement. The lode in the winze sinking below the 20, west from cross-course, is a fine course of ore, worth from 35l. to 40l. per fm. The lode in the 20 west is looking much better than for the past 3 fms. driving, now worth 10l. per fm., and kindly for improvement. The lode in the stopes in back of the 20 is worth 30l. per fm. The tribute department throughout the mine has an improved appearance, as well as the tutwork. We are busy dressing towards our next sampling, which will be about 600 tons.

NEW WHEAL ROSE.—J. Middleton, Jas. Hammill, jun., Oct. 13: The lode during last week's driving still continues to present the same favourable indications, but yesterday a cross branch came in from the west, which we cannot yet fully speak of; at present we think it to be one of Rose Cliff Mine lodes, but we shall by next week be able to sink more fully.

NORTH BULLER.—R. Pryor, H. Harvey, Oct. 8: The lode in the 100, east of engine-shaft, is 3 ft. wide, producing stones of copper ore, and letting out more water. The ground in the 100 fm. level cross-cut, south of shaft, is without much alteration since the last report, and we have not yet cut the lode. The lode in the winze sinking below the 70 is 18 in. wide, composed of mundic, peach, and spar, with good stones of copper ore, but not enough to value. The lode in the 80, on King's north lode, is 1 ft. wide, composed of mundic, prian, and spar, with a little copper ore.

NORTH CHIVERTON.—J. Hampton, Oct. 12: The deep adit end, east of the engine-shaft, is producing 2 tons of rich quality blende per fm. There is also more lead in the lode, worth for both minerals 12l. per fm.; price for driving, 30s. The back and bottom of the level are as good as the end, and standing in whole ground. We are getting down with the shaft by eight men as fast as possible, that a level may be extended underneath the shoot of blende referred to above. This will soon be done, and the ground is remarkably good in every respect. The stopes in back of the 20 are yielding the usual quantity of blende, and worth from 4l. to 10l. per fm. In the bottom of the 1[illegible], on Shepherd's lode, to the east of the little engine-shaft, we are sinking a winze on the leader part of the lode, which is worth 5l. per fathom for lead and blende. The lode in the new engine-shaft is nearly dipped out of the shaft, but it will be seen again in the cross-cut by-and-bye, no doubt leady, judging from its present character. Our parcel of blende realised 5l. 12s. per ton. According to the present price of mineral, we are raising about 200l. worth of lead and blende monthly, and at the same time laying open profitable ground much faster than we are taking it away.

NORTH DOLCOATH.—J. Vivian, J. Paull, Oct. 8: The engine-shaft is now down 9½ fms. below the 70; the lode is over 6 ft. wide, producing good stones of copper ore; thr ground rather harder than usual, which we think is likely to have a good effect on the lode. In the 70 west we have intersected the cross-course, and driven 2 fms. south on it, where the ground is favourable for driving, and congenial for mineral.

NORTH GREAT WORK.—J. Pope, Oct. 11: The south lode in the deep adit, east of Thomas's shaft, is 6 in. wide, saving work for tin. The south lode in the shallow adit, east of Vivian's shaft, is 18 inches wide, tinny work. The caunter lode in the shallow adit, north of Vivian's shaft, is 2 feet wide, opening ground that will work at about 1[illegible] in 1l.; in the same level south the lode is 1 foot wide, tinny work. The caunter lode at the pump-shaft is 2 feet wide, opening ground that will work at a moderate tribute. There is no change in the deep adit, south of Parson's shaft, owing to the men being taken up in the past week to spall and remove some tinstuff.—West Great Work have got a first-rate lode at the 8, driving towards our boundary.

NORTH SHEPHERDS.—Henry Bennetts, Oct. 12: Decimus engine-shaft is sunk 4 fms. 0 ft. 2 in. below the 20; set to eight men, at 22l. per fm. In the 20 end, driving west of shaft, the lode is 1 ft. wide, composed of flookan and soft spar; set to four men at 45s. per fm. In the 20 end, driving east of engine-shaft, the lode is 15 in. wide, containing flookan, soft spar, and mundic; set to four men, at 50s. per fm. The adit shaft, sinking below the surface, is sunk 13 fms. 4 ft.; the ground a little stiffer for sinking; set to four men, at 6l. per fm.

NORTH WHEAL BASSET.—G. Davey, Oct. 12: Main Lode: In the 112 fm. level, west of Grace's shaft, the lode is 3½ feet wide, worth 4l. per fm. for tin. In the winze under the 102 the lode is 4 ft. wide, worth 5l. per fm. for tin. In the 20 east the lode is 18 in. wide, composed of spar, mundic, and copper ore.—North Lode: In the 32, east of Grace's shaft, the lode is looking better to-day than I have ever seen it, being 2½ ft. wide, yielding 3 tons of copper ore, worth from 15l. to 20l. per fm. In the 20 east the lode is 18 in. wide, worth 5l. per fm. In the 20 west the lode is 1 ft. wide, producing stones of copper ore.

OKEL TOR.—W. B. Collom, W. Metherell, Oct. 12: In cutting through the lode at the 80 the capels to the south have been intersected, and we have resumed driving east again; the lode is 9 feet wide, and composed of peach, mundic, quartz, and stones of ore, and the lode is letting out a quantity of water. The lode in the 65 east has been taken down, and it will yield, as before stated at the last taking down, 6 tons of ore to the fm. In the cross-cut at the 50 the ground is becoming very wet, and in driving we are meeting with branches of capel and quartz. In the winze sinking under the 50 we continue to sink by the side of the lode. The two stopes in back of the 50 will yield respectively 6 and 4 tons of ore to the fathom. The lode in the 40 is 1½ foot wide, containing a little ore. On tribute, Williams's pitch, in back of the 80, is looking better.

PEDN-AN-DREA UNITED.—Wm. Tregay, J. Thomas, Oct. 8: Sump: In the 1[illegible] east end the lode has improved, worth 20l. per fm. The 130 west end is worth 6l. per fathom. In the 130 north cross-cut another branch is intersected, but poor. The 1[illegible] east rise is worth 3l. per fm. The 110 east end is worth 6l. per fm. In the 110 west end the main part of Skimmer's lode has now come into this end, forming together with the lode we had here before; the lode is from 7 to 8 ft. wide, worth 10l. per fm. The 110 west winze is worth 12l. per fm. The 100 west end is worth 3l. per fm. The 10[illegible] west rise is worth 3l. per fm. The 90 west end is poor. The 90 west rise is worth 10l. per fathom. The 90 west, on Skimmer's, is worth 9l. per fm.—Cobbler's: The 90 east end is worth 6l. per fm. The 68 east is poor. The 68 west end is worth 7l. per fm. The 90 east rise is worth 8l. per fm.

PENHALLS.—Wm. Higgins, J. Nance, Oct. 1: Engine-shaft: We have not yet done sufficient in the rise above the 60 cross-cut north to allow us to speak decidedly on the branch referred to in our last. The 60 west, on flat lode, is worth 7l. per fm. In the stope in back of this level the lode has again improved, now 15 in. wide, worth 14l. per fathom.—Flat-rod Shaft: East North Lode: The lode in the 20, west of cross-cut, continues small and poor. In the stope in back of this level the lode is worth 8l. per fm. In the 20, driving west, north of heave, the lode is 18 in. wide, worth 12l. per fathom, and in the stope in back of ditto 15l. per fm. The lode in the 20, driving west, south of gossan, is 20 in. wide, worth 10l. per fm. The stope in back of this level has greatly improved, now worth 12l. per fm. The 20 east, south of gossan, is worth 6l. per fm., and in the stope in back of ditto, 7l. per fm. No change to notice in either of the cross-cuts or other bargains throughout the mine.

PENNANCE CONSOLS.—H. Peters, Oct. 11: Fox's shaft, sinking below the 10, by nine men, at 12l. per fm.; down 10 fathoms; the lode is about 5 ft. wide, composed of branches of lead, jack, and mundic. We are now preparing to drive our level west from Fox's shaft on the course of the lode; there are rich stones of lead taken out of the lode in bottom of the shaft, and by the appearance of the lode we are near a rich lode of lead. There is another lode north of the south lode, which we do intend to cross-cut north to open on the lode, when we have extended our level about 2 fms. west of Fox's shaft.

PRINCE OF WALES.—Wm. Gifford, Oct. 11: We have taken down the lode in the 30, east of Watson's shaft, the same being from 2 to 2½ ft. wide, composed of spar and capels, with good stones of copper ore intermixed. In the 30 west we are carrying 2 ft. of the south part of the lode; the same produces good stones of black copper ore—a very promising lode.

PROSPER UNITED.—S. Lean, W. Millett, Oct. 13: The ground in Louisa's engine-shaft, sinking below the 80, is favourable for driving, down 6 fms. In the 80, west of Louisa's shaft, we are driving by the side of the lode for speed, the lode being spare, and letting out much water. The lode in the 70 west, north of the elvan, is 2 ft. wide, containing saving work for tin. The lode in the 60 west is 2 ft. wide, producing 1 ton of ore per fm. The lode in the 50 west will yield 1½ ton of ore per fm. The lode in the 70, west of Hand's shaft, is 5 ft. wide, producing 2 tons of ore per fm., and worth 5l. per fathom for tin. We set, on Friday last, Hand's shaft to sink below the 70, and also drive the 60 fm. level west of this shaft. All other places are without change since our last report.

ROARING WATER.—H. Thomas, Oct. 10: Last Saturday being the monthly setting-day, the following bargains were made:—Gilliman's shaft to sink under the 20 fm. level, with six men, at 14l. per fm.; the ground in this shaft is of a very kindly character, being mixed with yellow copper ore and mundic. The end to drive west from Grady's shaft, on Grady's lode, with four men, taken at 4l. per fm., extent to hole; the lode in the end is large, containing a beautiful rich gossan, ruby copper, and purple ore. The end to drive east from Bush's shaft, on Grady's lode, with three miners and six labourers, taken at 5l. per fm.; the lode in this end is also large, containing bunches of grey ore. I expect to effect a communication with this level in a fortnight or three weeks, when the water and stuff will be discharged by Grady's whim-shaft. I have thought proper to suspend the end driving west on the new lode until the level is holed on Grady's lode, which will cause a free ventilation. A sample of the ore from the east and west ends on Grady's lode, will be forwarded by next Thursday's steamer, which I expect you will receive on the following Monday. An inspection is invited.

ROSEWARNE CONSOLS.—T. Uren, J. Berryman, Oct. 12: There is no change to notice in the engine-shaft since last week. In the 80, west of Ellen's shaft, the lode is producing good stones of copper ore, and likely to improve. In the 70, east of Ellen's, the lode is large and promising, but at present poor. The south lode in the winze, communicated with the 60, is worth 8l. per fm. We shall set two tribute pitches on this lode next Saturday.

ROSEWARNE UNITED.—T. Richards, E. Carthew, Oct. 13: The lode in the 50 fm. level end, east of Giesler's engine-shaft, contains good copper ore, but not enough to value. The 50 end west is unproductive. The lode in the 40 end west is opening tribute ground. The rise above the 40 is worth 10l. per fathom. The 30 end, west of boundary shaft, is worth 14l. per fm. The rise above the 20 is worth 10l. per fm. The pitches are improved. Other places are unaltered.

SILVER VEIN.—E. Burn, Oct. 12: The sumpmen have completed the plat in the 60, and will finish the fixing of the penthouse to-day. We hope to be in full work of sinking next week. The lode in the 60 has improved, worth at present ½ ton of argentiferous copper per fathom; the ground is a beautiful blue killas, and congenial for mineral. The ore ground appears to be lengthening under the east and west lodes as we go down, which is very favourable for a good mine still deeper. The 50 north is not so kindly as last week; I expect we shall find a poor piece of ground for 2 or 3 fms. as in the 40 over. The 50 east is just as reported last week; the ground is getting stiffer. In the 40 north the lode will produce about ½ ton of ore per fathom, probably worth about 12l. per ton; we have had a lode of this value for the last 5 fathoms driving, and the end at present looks very favourable for its continuance.—Tribute: Hambly's, Mitchell's, and Netherton's pitches, in the 40, are worth 1½ ton of ore per fathom, or 8l. per fathom. Penrose's, in the 40, is worth 1 ton, or 8l. per fathom. Harper's, in the 40, is worth 4l. per fathom. Pryor's pitch, in the 30, are worth 10l. per fathom. We are getting on favourably with the reservoir and other surface work, and, on the whole, I am glad to say our prospects are more cheering than two months ago. Every care shall be taken in working the mine for the interest of the adventurers.

SORTRIDGE CONSOLS.—Robt. Jackson, Oct. 13: In Mayn's cross-cut south the ground continues easy for driving and congenial for mineral. In Doidge's rise, in the

back of the 50, west of ventilating shaft, the lode is 4 ft. wide, composed of spar, prian, capel, mundic, and a little ore. In the 40 east of John's cross-cut, on No. 1 south lode, the lode is 2½ ft. wide, composed of spar, prian, gossan, and good stones of ore. In the 20 east of the engine-shaft, on the south part of the main lode, the lode is 1½ ft. wide, yielding a little ore. In the deep adit level east the lode is 1½ ft. wide, composed of spar, prian, capel, and gossan. No alteration in the other parts of the mine and pitches.

SOUTH BULLER.—J. Hosking, Oct. 8: The character of the ground in the 24, driving east of engine-shaft, differs but little from last week; it is a very compact elvan, and spare for driving. In approaching the level driven west of flat-rod shaft we discover a little water oozing out upon the lode, and the country becoming more damp; the lode is 6 in. wide, composed of peach and quartz, impregnated with copper.

SOUTH CARADON WHEAL HOOPER.—Wm. C. Cock, Oct. 8: The 54 cross-cut south is just as last reported; the same remark applies to No. 1 south lode east. The No. 2 south lode west shows some signs of improvement. In my report last week I remarked that the lode in this place is divided into two parts, and that they appear diverging going west; we have now left the south part, and are driving on the north part, which, from its taking a more northerly direction, is likely to fall in with No. 1 south lode earlier than I anticipated; the south part seems to be taking off rapidly towards Nos. 3 and 4 south lodes. We have just commenced driving east on No. 2 south lode, but cannot say much about it yet. I may, however, just say we have broken some good stones of copper ore. I had samples assayed yesterday from Nos. 1 and 2 south lodes. The results are as follows:—No. 1, 25⅛ per cent., and No. 2, 20⅜ per cent. for copper.

SOUTH CONDURROW.—J. Vivian, Wm. C. Vivian, Oct. 10: The engine-shaft is now about 9 ft. under the 20, sinking in the country, the lode having an underlie out of it to the north. In the 20, east of the engine-shaft, the lode is 2 ft. wide, yielding good tinstuff, worth about 15l. per fm.—West Basset Lode: In the 20, west of Vivian's shaft, the lode is 1½ ft. wide, worth about 20l. per fathom. We have now driven about 5 fms. through the copper in this level, varying in value from 15l. to 40l. per fm.; and the lode in the end looks as favourable for continuing of good quality as it has ever done. In the 10 west the lode is about 1 ft. wide, but unproductive at present. In the 10 east the lode is 2 ft. wide, and of a kindly appearance, but unproductive. In the deep adit west the lode is small and unproductive. In the same level east the lode is 2 ft. wide, of a kindly appearance. There is nothing to remark on the other points of operation. We shall sample on the 19th inst. from 18 to 20 tons of good copper ore. We have no water yet to work the stamps, and, therefore, can make no return of tin. We have, however, some good tin ground, with which we shall be able to supply the stamps as soon as the water increases.

SOUTH CRENVER.—E. Chegwin, Oct. 12: In the adit end, driving east and west of cross-cut, on the north lode, the lode is 9 in. wide, producing stones of mundic; set to drive by four men, at 3l. per fm.

SOUTH DARREN.—J. Boundy, Oct. 11: The lode in the 60 west is 1 foot wide, containing a little lead and copper, and looking a little more promising. The lode in the 50 west is 20 in. wide, composed of a beautiful clay-slate, carbonate of lime, lead, and copper ore, altogether a very promising lode, although not quite ore enough at present to value. The lode in the 40 west maintains its size, character, and value as last reported; worth for lead and copper ore about 40l. per fm., and shows indications of further improvement. The lode in the 30 west is all the width of the end; worth at present 1 ton of copper and 1 ton of lead ore per fm. In the 20 west, in the cross-cut north, which has been driven 15 feet at this point, we have cut another part of the lode, containing lead and copper, of a very promising character; we shall now cut it through for the purpose of ascertaining its value. The lode in the shallow adit west is small, with spots of lead and copper, but not enough to value. In the shallow adit east we have not as yet reached the lode; the ground at this point is favourable for progress. All the other points in operation are being pushed on as fast as we possibly can, but without any change to notice since the last report. All the machinery is in good working order.

SOUTH DOLCOATH.—Wm. Roberts, Oct. 12: At the flat-rod shaft, sinking under the 36, the lode is much the same as when reported on last, the men not having taken it down for the week. In the 30 west the lode is 1 ft. wide, producing 1 ton of ore per fathom. The 24 east produces stones of ore; the lode is 1 foot wide. In the 70 east the men are not able to work until it is better ventilated.

SOUTH HERODSFOOT.—R. Goldsworthy, Oct. 12: On the 7th inst., setting-day, the engine-shaft measured 16 fms. 5 ft. 6 in. under the 36; the ground has greatly improved, and the shaft is let at 28l. per fm., and would be still subject to a greater reduction but for the great depth we have to draw the stuff by tackle. The ground now in the shaft is a dark blue killas of the most congenial description.

SOUTH LOVELL.—Capt. Chappell, Oct. 12: We have cleared up three shafts on three different lodes down to water. The shafts are sunk downright, and the lodes cut by short cross-cuts. We have cleared up the middle shaft, and forked the water down about 6 ft. below the level, but have not been able to see the end of ground either east or west. We cannot give you the character or size of the lodes till after we can clear the shaft up to bottom of adit, as we are not opening on it from surface, the old men having done all this before us. During the past fortnight we have been cutting down the whim-shaft on the middle lode, so as to be large enough to take a 9-inch lift, and work the whim-kibbles to draw the stuff away; the shaft was very small. When we get the water out of this shaft it will drain the whole of the lodes down to adit, so as to ascertain the size and character of the lodes. We hope to get the lift to work by Friday evening. As soon as I can see the lode I will give you the information you required, but cannot before; and, while we are doing this to asceitrin the nature and character of the several lodes close together at this point, we ought to be thinking about an engine. We shall not decide as to the spot for the engine till the above work is accomplished. We shall not clear up the shallow adit, it will be too costly; that was the reason why the former adventurers did not do it. Our main object is to get below the former workers, and raise tin, which I am sure we shall do, from what I can see of the ground. The arch of tin mentioned in my previous report, standing in the end of the shaft, was where the lode passed through the shaft, not the bottom of the adit, it was the bottom of the shaft at the time. I will send you the sketch that you ask for in the course of next week, and will also give you a full report of what is done, and what is doing, in the mine, with shafts, &c., properly marked down.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Oct. 8: The lode in the rise above the adit is 18 inches wide, of quartz, gossan, &c., a very kindly lode, but which shows the best appearance in going below the level. The ground in the new shaft is a little stiffer than we expected.

SOUTH WHEAL TOLGUS.—J. Jewell, J. Symons, Oct. 12: Youren's Lode: The lode in Michell's shaft, sinking below the 150, is 2 feet wide, consisting of peach and mundic. In the 150 west the lode is 18 inches wide, composed of peach, mundic, and sparr. The lode in the 150 east is 2 feet wide, consisting chiefly of mundic. In the 140 west the lode is 20 inches wide, producing good stones of ore—a kindly lode. The lode in the 130 west is 2 ft. wide, producing 1½ ton of ore per fathom. The lode in the winze sinking below the 130 west is 20 inches wide, producing 2 tons of ore per fm. We have four stopes over the back of the 130 west working by 24 men, each stope yielding 3 tons of ore per fathom. In the 120 west the lode is 15 inches wide, producing 1 ton of ore per fathom, and promising for improvement. We have to-day holed the winze in bottom of the 110 west to the 120; we shall put the men to stope west from the winze for the month out. In the 90 west the lode is 1 foot wide, consisting of spar and mundic.—New South Lode: In the 66, east of the rise, the lode is 18 inches wide, consisting of spar, peach, mundic, and stones of ore—a very kindly lode.—South Lode: In the 140 east the lode has not been taken down since last reported. The lode in the 130 east is 2½ feet wide, composed of spar, peach, and good stones of tin ore. In the 120 east the lode is 1 foot wide—unproductive. The lode in the 110 east is 18 inches wide, chiefly flookan. In the 100 east the lode is 3 ft. wide, consisting of peach, mundic, and killas, with occasional stones of tin. The stope in bottom of the 100 east is worth for tin about 10l. per fathom.

ST. DAY UNITED.—F. Pryor, J. Cock, Oct. 8: Oppie's engine-shaft, sinking below the 184, is worth 40l. per fm., but still hard, and spare for sinking. In the 184, east of shaft, the lode is 3 ft. wide, and worth 15l. per fm. In the 174, east of shaft, the lode is 2½ ft. wide, and worth 10l. per fm. The winze sinking below the 164, east of shaft, is producing a little tin.—Billing's Shaft: There is no change in the 184, west of this shaft. The lode in the 174 west is 6 ft. wide, and worth 20l. per fm. In the 164 west the lode is 3 ft. wide, and worth 12l. per fm. The winze in the bottom of the 174, west of shaft, is worth 15l. per fm.—Trussall's Shaft: In the 124, west of shaft, the lode is 5 ft. wide, and worth 15l. per fm. The 224, west of Trussall's shaft, on the copper lode, is producing some rich stones of ore, and has a very kindly appearance. The 104, west of Trevivian's shaft, on the tin lode, is 5 ft. wide, and producing good work for the stamps; at this place we may expect an early improvement, as this end is getting under the tin ground in the level above.—Bissoe Pool: We have commenced to cross-cut north at the 154, west of engine-shaft, to intersect the copper lode, which level will come under Richard's shaft. Richard's shaft, sinking below the 140, is down 4½ fms. in a lode 2 ft. wide, worth 1 ton of good ore per fm. In the winze sinking below the 130, west of Richard's shaft, the lode is 3 ft. wide, worth 2 tons of ore per fm. The stopes and pitches throughout the mine are yielding their usual quantity of tin.

ST. IVES WHEAL ALLEN.—John Nancarrow, Joshua Daniel, Oct. 13: The stope in the back of the 20 west is worth 5l. per fathom. The end does not yield much tin. The winze below the level yields a little tin. The winze below the 20 east is improving. The east stope below this level is worth 5l. per fathom. The middle stope is worth 5l. per fathom. The west stope is worth 4l. per fathom. There is no improvement in the 40 east since last week. The 40 west looks very promising. We have stones of tin in the 50, east of shaft. The stope at Charles Frederick's is worth 5l. per fm.

ST. JUST CONSOLS.—Wm. Williams, Oct. 12: We have extended the 20 fm. level 2 fms. east and 2 fms. west from shaft, on Casley's lode; there is a kindly lode in the east end. The whim and skip are working well; we can now draw in four hours as much as we could in eight hours, and at one-half the cost. On the Guide lode we are stoping a good lot of tinstuff, but are very much impeded by want of water for stamping.

ST. JUST UNITED.—John Carthew, October 12: Saveall's lode, in the 62, east of engine-shaft, is worth 5l. per fm. The 62 west is worth 4l. per fm.; we are expecting to cut the killas in this end every foot we drive. The 62, east of the rise, is worth 3l. 10s. per fathom, as also is the 62, west of rise. The stopes over these ends can be worked at 30s. per fm.—North Lode Shaft: We are cutting plat in the 74, and extending the level west, by three men, at 55s.; the lode is worth 4l. per fm. In the winze sinking under the 62 we have still a good lode of tin in the side, which we shall leave standing until the winze is through to the 74. From the Red Dipper shaft we are extending the 50 north, on Wheal Owl lode, worth 4l. per fm. In the 40 south the lode is worth 6l. per fm. We have just now got into a good run of tin ground in this end, and from the appearance there is every probability of its holding down. The 20 east, on Wheal Venton lode, is very kindly; the lode is 2 feet wide. Some of the poorer ends we have suspended. Our tributers are working well, and the pitches are looking promising.

TORBAY HEMATITE IRON.—S. Paull, Oct. 8: The lode in the end driving west from the new shaft is at present poor, although we daily expect to meet the rich shoot of iron from the Derrick shaft. The end east from shaft is producing a fair quantity of iron, and we hope will be continuous. The bottom stopes under the Derrick is producing a splendid sample of iron, and is showing a lode from which a great quantity of iron will be taken away. The middle stopes are much as usual, and the stopes from the new cutting are producing a fair quantity of good quality iron. We shall raise about 1000 tons of ore this month, in addition to the 290 tons in stock the end of September (weather permitting). We shall set the whim to work next Tuesday.

TRELOWETH.—T. Richards, Oct. 13: The lode in the winze sinking below the 154 is worth 8l. per fm. The lode in the 144 end, east of sump-winze, is worth 12l. per fm. The lode in the 134 end, east of sump-winze, is worth 8l. per fm. The lode in the 124 end, east of sump-winze, is worth 4l. per fm. The lode in the 110, east of engine-shaft, contains a little copper ore. In the 134, west of engine-shaft, the lode contains very little ore. No alteration in the 134 cross-cut driving south. The stope in back of the 144, west of winze, is worth 20l. per fm. The stope in back of the 134 is worth 12l. per fm. Other places without change.

TRELYON CONSOLS.—R. James, E. Pooley, Oct. 13: The branch in bottom of the 20, running south of the north lode, is worth 20l. per fm. We have holed the 40, east of Parry's, on the north lode, to the 40, west of Lawry's, on the south lode, where the water will flow to the engine.

TREREW WHEAL ROSE.—J. Middleton, W. Billing, Oct. 13: The plat at the adit level, at Vigar's engine-shaft, is complete, and we have commenced sinking the shaft, and are glad to say the ground is very good, and highly metalliferous.

TREVENEN AND TREMENHEERE.—J. Medlen, W. Tippett, C. George, Oct. 12: The lode in the 162, east of Trevenen engine-shaft, is worth 9l. per fathom. The end going west in this level is worth 6l. per fathom. No. 1 stope in this back is worth 12l. per fathom, and No. 2 is worth 7l. per fathom. The stope in the 140, east of old sump, is worth 4l. per fathom. The lode in the new sump-shaft, sinking below the 150, is worth 18l. per fathom. The 150 end, going west of this shaft, is worth 3l. per fathom. No. 1 stope in the back is worth 7l. per fathom, No. 2 is worth 5l., and No. 3 is worth 6l. per fathom. This level, driving east, is worth 8l. per fathom. There is no change in any other part of the mine to call for remark since the last report. We are glad to say all the machinery is working well, and great progress is being made in sinking the new sump. The sinking of Trevenen shaft will be resumed next month.

TRUMPET UNITED.—G. R. Odgers, Oct. 8: The lode in the engine-shaft, sinking below the 60, is 6 in. wide, producing good stones of tin, and the ground is getting much easier; this is a good indication for going below. The lode in the 60 west is 1 ft. wide, of mundic, peach, and a little tin, but not enough to value; the same may be said of the winze sinking below the 50 west. The lode in the 25 west is 6 in. wide, and producing good work for tin, worth 9l. per fm. The stopes above the 25 west are worth 6l. per fathom. The lode in the 15 west is 10 in. wide, and worth 12l. per fm. The stopes below the 15 west are worth 7l. per fm. The lode in the shaft sinking below the 15 is small, but yielding a little tin.

VALE OF TOWY.—Arthur Waters, T. Harvey, Oct. 11: The 124, north of Clay's engine-shaft is going forth in a great lode, the yield for blende being of a very encouraging character. Richards's rise, in said level, about 7 fms. behind the end, is up 4 feet; lode carrying rich leaders of solid blende, and improving as we advance. The 124 south is getting into better ground. Curtis's rise in the 110 fm. level, north of Field's, is up 2 fms. 0 ft. 7 in.; lode getting softer, and more productive of late. Jones's stope, in the same level, north of shaft, is worth 2 tons of blende for fm. We have set 6 fathoms at Field's shaft below the 110, at 17l. per fm., including fixing of penthouse, &c.; lode in present bottom worth 3 to 4 tons per fm. In the 110, south of said shaft, the lode is 3 ft. wide, yielding saving work throughout.—Tribute: Stickland's pitch in the 124, south of Clay's, is worth 1½ to 2 tons of blende per fathom. Jones's pitch in the 110, north of Field's, is worth about 3 tons per fm. Williams's pitch in the same level, south of shaft, is worth 4 tons of blende per fm. Harding's pitch in the 100, south of Wenallt's, is worth 2½ tons per fm. Barn's pitch in the same level, south of boundary, is worth 3 tons per fathom. Lewis's pitch in the 100, north of Field's, is worth 2 tons of blende per fathom.

WENTNOR.—J. Roberts, Oct. 12: We are still driving the 60 east; there is very little alteration in the ground since last week, still passing through a very hard bed of spar; when we get through this spar we may hope for lead ore.

WEST BASSET.—William Roberts, Oct. 12: On the middle lode, in the 52 west, the lode is 2 feet wide, all saving work for tin. The 52 east produces 2 tons of copper ore per fathom.—Engine Lode: In the 114, west of Grenville's engine-shaft, the lode has improved within the last few days; it is now 1½ ft. wide, producing 1½ ton of ore per fathom. The 104 west produces good stones of ore, and is showing signs that further improvement may be expected. All other operations are going on much as usual.

WEST CWM ERFIN.—Oct. 11: The lode at the adit level, going east of engine-shaft, is 3 ft. wide, containing a little ore, but not to value at present, the lode being rather disordered of late by several cross-joints, which is letting out a great quantity of water. The cross-cut north in this level is being pushed on by six men; nothing of importance has yet been met with. The shaft is in a good course of sinking by nine men, although the water is rather quick; the lode here, or rather the part we are sinking on, is showing a little ore at times. We shall not be long now before we shall get the shaft down for a 14 or 15 fm. level, to be extended east and west of the shaft, in order to open out the mine at that depth as quickly as possible. We are getting on with the wheel-pit, lobby, &c.

WEST GRYLLS.—J. Curtis, J. White, Oct. 12: The stopes in the bottom of the 40, west of Trevelyan's shaft, are now worth about 12l. per fm. In the 15, east of Watson's shaft, the lode is 18 in. wide, with good stones of tin in it, and in a few fathoms further driving the Chiverton Standard lode will be met with, at which point a good lode is expected. In the winze sinking below the 15, west of Hosking's shaft, the lode is 18 in. wide, worth 4l. per fm. At Hosking's shaft the men are cutting plat, fixing ladders, &c., and shall commence driving the 40 fm. level cross-cut south to the great copper lode in the course of a few days.

WEST NANTY.—The lode in the adit level, going east of engine-shaft, is larger, and the part we are driving on is yielding good stones of lead ore, and looking very promising ground hard for exploring. The lode in the same level, going west, is still large, yielding stones of ore, but not to value at present. The shaft is in a good course of sinking, below the adit level, but is mostly to the south of the main part of the lode, yielding good stones of ore at times. The stope over the adit level, 5 fms. west of the cross-cut, is on a large lode, yielding pretty good saving work. The wheel-pit for the crushing mill is completed, and we are now getting on as fast as possible with the crusher-house, &c., and also erecting the crusher-wheel as fast as possible.

WEST SHARP TOR.—William Richards, Oct. 10: We have intersected some granite in the extreme point of the No. 4 cross-cut in the adit level, but whether it is through the lode or not we cannot tell at present; a few days more will prove it probably. The part of the lode now being cut into in the No. 6 cross-cut, in the 162 east, contains capel, quartz, and peach, thickly charged with mundic, and a little yellow copper ore. The part of the lode carried in the 162, east of the No. 4 cross-cut, contains capel, quartz, iron, and gossan, and on the south side of the end there is a leader of gossan and grey copper ore, worth 12l. per fm. The part of the lode carried in the 162, west of the No. 4 cross-cut, is composed of capel, quartz, iron, mundic, and rich grey copper ore—good saving work. We have not yet reached the main part of the lode in the No. 5 cross-cut in the 162 west, but the appearances here are very cheering. Fair progress is being made, and we obtain some grey copper ore and green carbonate of copper, intermixed with kindly quartz, iron, &c.

WEST WHEAL JANE.—J. Cock, Oct. 8: At Painter's engine-shaft, sinking below the 30, the lode is large, producing a little tin, but not sufficient to value. The 30 fm. level, driving east of shaft, is producing saving worh for the stamps. The lode in the winze sinking below the 30, east of shaft, is 6 ft. wide, worth 15l. per fm. In the 30, driving west of shaft, the lode is large, but poor. In the 20, west of shaft, the lode is 6 ft. wide, worth 10l. per fm. The 10, east of shaft, is for the present suspended, and the men are employed improving the dressing-floors. The lode in the middle adit level, east of Venable's shaft, is 5 ft wide, worth 12l. per fathom. Our stopes and pitches are looking just the same as when last reported. We sold to-day 8 tons 16 cwts. 1 qr. 12 lbs. of black tin, at 57l. per ton, which realised 503l. 14s. 11d., and have also sold for this month 40l. worth of mundic, and offered 1700 sacks of tinstuff which we could not stamp or dress for want of water; but the bidding being 25 per cent. below our assay, we refused to sell. We considered the tinstuff worth 100l.; they only offered 75l.

WEST WHEAL TREVELYAN.—J. Harris, Oct. 8: No change has taken place in either of the ends during the week, no lode having been taken down.

WEST WHEAL VOR.—J. Southey, Oct. 11: Good progress is being made in cutting ground at the adit level for cistern-plat, &c. The erection of engine, and other surface work, is progressing satisfactorily.

WHEAL AGAR.—William Roberts, Oct. 12: In the 100, east of Windstow shaft, the lode is 3 feet wide, composed of flookan, spar, and a little ore. In the 60, west of cross-cut, the lode is 1½ foot wide, producing good stones of ore.—Western Engine-shaft: In the 100 east the lode is 2½ feet wide, composed of mundic, peach, and stones of ore—a kindly lode.—North Lode: In the winze sinking under the 70 the lode is 3 feet wide, producing 1 ton of ore per fm. The sinking of the old whim-shaft is progressing favourably, it is now about 20 fms. below the 90. In other parts no alteration to notice.

WHEAL CREBOR.—John Hitchins, J. Gifford, Oct. 11: Cock's shaft is now down 6½ fms. below the 96, in which the lode is 6 ft. wide, with strong and masterly capels, composed of quartz, peach, and mundic, with good stones of copper ore throughout, most promising for speedy improvement. In the 96 east, now 4 fms. east of winze, we are taking down the lode, which, so far as seen, is 3 feet wide, worth 2 tons of ore per fm.; a most promising end. The stope east of winze, below the 84, is still yielding 6 tons of ore per fm. The 84 east is improved; the lode is 1½ foot wide, yielding saving work—say, 1 ton of ore per fm. In the 72 east the lode is 3 feet wide, worth 2½ tons of ore per fm., with strong rocks of arsenical mundic, being in virgin ground more than 40 fms. east of any other working in the mine. The 48 east, lately resumed driving both for ventilation and discovery, is progressing with due dispatch, but as yet the lode is unproductive, the only barren level in the mine. The 96 west has a lode 7 feet wide; 3 feet of the south part is worth 6 tons of ore, or 40l. per fm., and better in the bottom; here we expect a good deposit. We have began a winze in the bottom of the 84 west by the side of the lode for expedition, the which, when holed, will ventilate this part of the mine. The foregoing shows five levels driving, four of which are productive. The mine never looked so well as at present. Our sampling will be on the 28th, when we shall have full 120 tons of better ore than the last parcel.

WHEAL EDWARD.—G. Rowe, Oct. 8: The lode in Potter's stope, in bottom of the 81 west, has improved, worth 10l. per fm. The lode in Coad's stope, in bottom of the same level, is worth 8l. per fm. The lode in Bennett's winze sinking below the level has improved, worth 10l. per fm. The lode in the 61 west is showing a kindly appearance, and producing good stones of ore. The lode in the 50 fathom level west is small and unproductive.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Oct. 8: There is no change in the 120 west since our last advice. The lode in the 110 west is from 3 to 4 ft. wide, yielding tinny work, worth 12l. per fm. The lode in the 110 east is 2 ft. wide, yielding saving work for tin. The lode in the stope above the 110, west of junction, is worth 20l. per fm. No alteration in the 100, east of the new shaft. The lode in the stope above the 100 east is worth 12l. per fm. The lode in the stope above the 100, west of new shaft, is worth 25l. per fm. The stope further west is worth 10l. per fm. The lode in the 90 east is 18 in. wide, and worth 10l. per fm. Two stopes above the 90, east of new shaft are worth 15l. each. The stope above the 90 west is worth 26l. per fm. The lode in the 80 east is heaved by a slide, and which is forming itself again in the north side, from which we are breaking good stones of tin. The lode in the stope above the 80, west of new shaft, are producing good work for tin, worth 28l. per fm. The lode in the rise above the 80 west is worth 15l. per fm. There is no change either in the rise against the new shaft or the 66 west since our last advice.

WHEAL HARRIETT.—S. Williams, Oct. 8: There has nothing been done in the bottom of the engine-shaft for the week, in consequence of the water being more than the engine could pump out, but I think the water is abated, so that we are now forking. The north part of the main lode in the 130 east end is unproductive. The north part of the main lode in the 115, west end, is producing stones of copper ore, and promising for improvement. The north lode in the 115, west end, from east cross-cut, is producing good stones of copper ore; the water is drained from this lode by the 115 fm. level cross-cut, north from engine-shaft. The progress in the 115 north cross-cut has been slow this week in consequence of so much water; I think we are getting very near the lode at this point.

WHEAL HOPE.—W. H. Reynolds, Oct. 11: The lode in the 85 east is worth 7l. per fathom, and west 3l. per fm. We have not yet cut the main lode in the 75 cross-cut south. The lode in the 65 west yields 3 cwts. of lead per fm. In the 28 west the south lode is spotted with lead, and looks promising.

WHEAL KITTY (St. Agnes).—S. Davey, W. Polkinghorne, Oct. 8: Holgate's shaft: In the 82, west of shaft, the lode is at present disordered by a slide.—New Shaft, Pryor's Lode: In the 65, driving east of shaft, the lode is worth for tin 10l. per fm. In the 65, driving west of shaft, the lode is worth for tin 22l. per fm. In the 54, driving east of shaft, the lode is worth for tin 10l. per fm. In the 54, driving west of shaft, the lode is worth for tin 12l. per fm. In the 44, driving east of shaft, the lode is 2 ft. wide, worth for tin 8l. per fm. In the 44, driving west of shaft, the lode is worth for tin 12l. per fm. In the 34, driving east of shaft, the lode is somewhat improved, being worth for tin 6l. per fm. The ground in the 82 cross-cut south has become highly impregnated with mundic, which we regard as a good indication.—Wheal Vottle: We have four men employed in this part of the mine, ridding and securing an old shaft below its present depth of 7 fathoms under adit, and shall, in all probability, soon reach its real bottom, when some evidence as to its condition will be given, very little having been done at this point within the memory of man.

WHEAL KITTY (Lelant).—Wm. Williams, Oct. 13: North Russoe Lode: The lode in the rise above the 140 is worth 5l. per fathom. The lode in the winze sinking below the 110 is worth 6l. per fathom.—Gowan Lode: Rogers's shaft is sunk to the 100, at present the men are engaged cutting plat. In the 90 end west the lode is at present small. The lode in the 80 end east is worth 2l. per fathom. The winze sinking below the 80 is opening tribute ground. The lode in the 80 end west is worth 3l. per fathom. The lode in the 70 end west is worth 5l. per fathom. The lode in the 70 end east is producing good stones of tin. The stope over the 70, west of Rogers's shaft, is looking very well, worth 60l. per fathom. The lode in the 30 end east is worth 4l. per fathom. No change to notice in any other part of the mine.

WHEAL MARGERY.—R. James, W. Rogers, Oct. 13: At Wellesley's engine-shaft, 6 fms. below the 110, the lode is without change. In the 70 west the lode is also without change. The 110 east is holed to the 110, west of the American. At the American shaft, 4 fms. 4 ft. below the 132, the lode is worth 12l. per fathom for length of shaft—12 feet. In the 132 west the lode is producing stones of ore, but not to value. The stope in the back is worth 6l. per fathom. In the 132 east the lode is worth 10l. per fathom. No. 1 stope, in the back, is worth 20l. per fathom. No. 2 stope in ditto is worth 15l. per fathom. In the 122 east the lode is producing stones of ore. No. 1 stope in the back is worth 4l. per fathom. No. 2 ditto is worth 12l. per fathom. In the 122 west the lode is poor. No. 1 stope in the back is worth 4l. per fathom. No. 2 ditto is worth 6l. per fathom. No. 3 ditto is worth 7l. per fathom. No. 4 ditto is worth 12l. per fm. No. 5 ditto is worth 4l. per fathom. In the 110 east the lode is worth 2l. per fathom. The stope in the back is worth 10l. per fathom. No. 1 stope, in the back of the 110 west, is worth 4l. per fathom. No. 2 ditto is worth 9l. per fathom. In the 100 west the lode is worth 5l. per fathom. No. 1 stope, in the back, is worth 5l. per fathom. No. 2 ditto is worth 10l. per fathom. No other change. We expect a pretty good sampling next time, which will be on Tuesday week next. The stopes are yielding very good quantities, and the quality quite up to any other time.

WHEAL MARY ANN.—P. Clymo, H. Hodge, J. Harris, J. Stevens, Oct. 13: Clymo's shaftmen having completed casing and dividing the shaft from the 190 to the 200, are now engaged fixing bearers, cistern, &c., at the 200; set to drive a cross-cut at the 200 towards the lode. In the 190, north of Clymo's shaft, the lode is 2½ ft. wide, worth 8l. per fm. In the same level south it is 3 ft. wide, worth 7l. per fm. In the 180 north it is 3 ft. wide, worth 10l. per fm. In the same level south it is 4½ ft. wide, worth 11l. per fm. In the 170 south it is 4 ft. wide, and worth 8l. per fm. In the same level, north of Pollard's shaft, it is 3 ft. wide, worth 6l. per fm. The stopes and pitches are producing much as usual. We sold on the 11th inst. two parcels of lead ores; No. 1 (computed), 46 tons, to Messrs. Sims, Willyams, and Co., at 27l. 18s. 6d. per ton, and No. 2 (computed), 30 tons, to the Trustees of the Treffry Estate, at 11l. 4s. 6d. per ton.

WHEAL MARY HUTCHINGS.—Wm. Edwards, Oct. 11: The deep adit cross-cut going north is now extended 15 fms. from No. 4 shaft; the ground has recently a little improved, and I anticipate within a short distance further to intersect the elvan lying south of the great copper lode, when I have no doubt of making much greater progress in driving this level. We have a pare of men engaged in clearing and securing the adit level on the caunter lode, which I find to be very large, composed of gossan, friable spar, mundic, with occasional spots of black and yellow copper, turning out rocks 5 and 6 cwts. each. We are near No. 1 shaft, and should the level be found standing secure beyond that point, we shall in a very short time reach the present end (which is near the granite), and will give good backs as we advance in the hill. I am informed that this level was driven about 150 years ago. The shaft sinking to cut the No. 1 south tin lode is down 5 fms., and ground most favourable for progress.

WHEAL NORRIS.—John Andrews, Oct. 8: At our setting, to-day, the following bargains and pitches were set:—Carter's shaft to sink below the 45, by nine men, at 25l. per fm. The 45, to drive east of Carter's shaft, by six men, at 2l. 10s. per fm. The 35 to drive east and west of cross-cut, by four men, at 30s. per fm. The 35 to drive west of cross-cut, by four men, at 4l. 10s. per fm. The 35 cross-cut to drive south of Carter's shaft, by four men, at 3l. 15s. per fm. A pitch in the back of the 35, east of Carter's shaft, by four men, at 8s. in 1l. We are stoping the back of the 35, adjoining the pitch, by eight men. These men have not taken anything.

WHEAL PROSPER.—S. Mitchell, Oct. 13: There is no change in the cross-cut at the 40 since my last report. The lode in the end east of new shaft is 9 in. wide, producing good stamping work. The lode in the end driving west has further improved, being 18 in. wide, and very good for tin.

WHEAL SIDNEY.—Wm. Edwards, Oct. 12: There is no change in the 60 ends east and west since last reported. The lode in the 46 end east is about 4 ft. wide, saving work for tin; the same may be said of this level west, excepting size of lode, which is 18 inches. The different stopes between the 60 and the 46 are producing much the same quantity as for some time past. The stopes in back of the 46 are at present not quite so good. The various works are progressing steadily. We shall send samples of our parcel to tin to the smelters to-morrow, computed 5½ tons.

WHEAL SPARNON.—Wm. Tregay, E. Chegwin, Oct. 8: The cutting down of the engine-shaft is progressing rapidly; now down 13 fms. below the 20. The lode in the 20 west will produce 1 ton of good quality copper ore per fathom. We have intersected a lode in the 20 north cross-cut, but it is small at the point of intersection, composed of quartz and gossan, and containing a little of the carbonated oxide of copper. Our surface work is being proceeded with vigorously.

WHEAL TREVENNA.—T. Jennings, Oct. 13: The operations in this mine are progressing satisfactorily; the eastern deposit of tin ground is 36 ft. thick, and as rich as last reported, producing 2½ cwts. of tin to the 100 sacks of stuff; the ends extending west in this deposit are improving. In the deposit, about 400 fms. further west, we have sunk 6 fms., and not yet at the bottom of it; and the deeper we are the richer we find it; it is now producing 5 cwts. of tin to the 100 sacks of stuff. We have an east and west tin lode in this deposit; within a short distance from our workings we are finding a quantity of stones in this deposit very rich for tin, worth 30s. per sack; this lode has been worked on the shallow part of it to a great extent by the ancient miners. It is my opinion those rich tinstones come from this lode, and the lode is rich under the old men's workings; I hope to be able to let you know more about it in my next report, as I shall lose no time in developing it. We are looking well throughout the mine, and the value of the mine is daily increasing as we are developing it. We are getting on as fast as we can with our stamps, wheel-pit, and laying out our dressing-floors, and no time shall be lost in getting the stamps in full operation.

WHEAL VLOW.—J. Tonkin, W. Johns: The engine-shaft is sunk 5 fathoms below the 10; the lode is 4 ft. wide, worth 8l. per fathom for the length of the shaft. In the 10 west the lode is producing a little tin, but not of much value. In the winze under the 10 fm. level, 8 fathoms west of the shaft, the lode is 5 feet wide, worth 10l. per fm. In the stopes over the 10, west of the shaft, the lode is 4 ft. wide, worth 4l. per fathom. In the stopes No. 1, over the deep adit, the lode is 4 feet wide, worth 6l. per fathom. In the stopes No. 2, over the deep adit, the lode is 3 ft. wide, worth 4l. per fathom. During the last two months our tin dressing has been greatly interrupted for want of water; we have only a small quantity of water left after the engine is supplied with condensing water. We shall during the winter months be able to dress the slimes we have now on the mines, and stamp a great deal more stuff than we can now do.

WHEAL UNION.—Thos. Glanville, Oct. 7: Tutwork Setting: The flat-rod shaft to sink below the 88, by nine men, at 46l. per fathom; the lode in the bottom of the shaft is 4 feet wide, composed of spar, mundic, and copper ore, but not to value. The 76 to drive east of the flat-rod, by four men, at 7l. 10s. per fathom. The old engine-shaft to sink below the 20, by nine men, at 20l. per fathom. The engine-shaft to sink below the 40, by nine men, at 50l. per fathom. The 60 fm. level cross-cut to drive north from East Carn Brea, by six men, at 12l. 10s. per fathom.

WHEAL UNITY CONSOLS.—W. H. Reynolds, Oct. 11: The lode in the shaft below the 60 is yielding good stones of ore, and improving. The winze is down 6½ fms. below the 60, and worth ¾ ton of ore per fm. As the shaft and winze are going down in a run of ore ground, we calculate in this next level laying open good tribute ground.

WHEAL UNY.—Samuel Coade, Matthew Rogers, Oct. 8: There is no change in the tin lode, but it is just the same in value as last week. We shall get the stamps' boiler at work on Tuesday next, with the additional 12 heads of stamps, and shall then be in a position to increase our returns. We have not driven on the branch of copper ore intersected in the 58 cross-cut south last week, but are still driving south, as we consider we are not far enough yet to intersect East Carn Brea south lodes.

YARNER.—R. Barkell, Oct. 12: The 40 east, on the north lode, is still looking well, the lode containing all the elements for making a quantity of copper, and is now worth fully 3 tons of copper ore per fm.; the lode is well defined, and letting out water freely. The 30 east, on the south lode, is in a beautiful channel of ground, but the lode is split up in branches; I am not inclined to think we have the main part of the lode in this end, and believe we ought to cross-cut north and south shortly to prove whether the main part is standing. The stope in back of this level is not looking so well. The one in bottom of the 20 is worth 2½ tons per fm., and the one in bottom of the 30, west of shaft, 3 tons per fm. The ground at the new engine-shaft is easy for sinking, and we are making good progress here; it is now down about 15 fms. The adit going towards this shaft is rather spare for driving, owing to some hard floors of spar in it.—P.S. I have not been able to get any men to go in the 50 east, on the south lode, neither in the stope in back of the 40, on the north lode; they are very scarce.

FOREIGN MINES.

LUSITANIAN.—Oct. 1: Palhal Mine—Basto's Lode: In Taylor's engine-shaft the lode is 4 ft. wide, in the north of which there is a branch of ore worth 2 tons per fathom. The lode in Perez' shaft is small and poor, and the ground hard for driving. In the 80, east of Taylor's, the lode is 1 ft. wide, composed of flookan and quartz. In the 80, west of same shaft, the lode is 2½ ft. wide, composed of quartz and spots of lead. The lode in the 70, east of River shaft, is 2 ft. wide, composed of flookan, quartz, and stones of ore. The lode in the 70, west of Taylor's, is composed of quartz and stones of ore. The rise above the 60 is holed to the winze. In the 60 cross-cut, north of River shaft, the ground is still very hard. The 28 cross-cut, north of Perez' shaft, is to cut a branch gone off north in the 8 fm. level, which we had in sinking Perez' shaft below that level. The lode in the 50, west of slide lode, is composed of quartz and flookan. The lode in the 38, west of Perez' shaft, produces small stones of ore. In the 28, west of same shaft, the lode is composed of quartz and flookan. The lode in the 18, west of Perez' shaft, is unproductive. In the rise above the 38 the lode is composed of quartz, mixed with the country. The lode in Fronsaca's winze is worth ½ ton per fathom. The stopes above the 8, west of Perez' shaft, are worth 1½ ton per fathom. The stopes above the 60, east of River shaft, are worth 1 ton per fathom. The stopes above the 60, west of Joaquim's winze, are worth 1½ ton per fathom. The stopes above the 70, east of Taylor's shaft, are worth 1 ton per fathom. The stopes above the 7, west of Taylor's shaft, are worth 1 ton per fathom. The stopes above the 50, west of Nort's winze, are worth 1½ ton per fathom. The stopes above the 80, east of Taylor's, are worth 2 tons per fathom. The stopes above the 60, east and west of Jacinto's winze, are worth 1½ ton per fathom. The stopes above the 50, east and west of Machado's winze, are worth 1½ ton per fathom. The stopes above the 38, between the caunter and slide lodes, are worth ½ ton per fathom. The stopes above the 40, west of Oak shaft, are worth 1 ton per fathom. The lode in the 50, east of slide lode, is worth ½ ton per fm. We purpose driving the 28, east of slide lode, to see if we can find the Ponte lode. The 50, west of Oak shaft, is on the great caunter lode, which is 6 inches wide, composed of quartz.—Carvalhal Mine: In the adit north-west, on the caunter lode, the lode is 2½ ft. wide, composed of quartz and spots of lead. We have completed cutting down the incline shaft, above the adit, and shall begin cutting it down below the adit next week.

NOVA SCOTIA LAND AND GOLD CRUSHING AND AMALGAMATING.—The directors have received by the present mail advice of the shipment of 79 ozs. 1 dwt. of gold, produce of Sherbrooke and Oldham for September. The agent, writing from Sherbrooke, says, in reference to Sear's lode, "This lode has improved since last crushing. We have only taken down about 8 ft. this month, owing to its being rather hard to work, from the south droppers coming in. We have sunk deep enough in the shaft to prove that those droppers will run out when about 5 ft. deeper, and then I have no doubt but that we will get the lode all along the bottom the same size as it is at the bottom of the shaft, 8 in., and if as good as in the bottom of the shaft will produce 2 ozs. per ton." From Oldham the agent writes, "Wallace upper shaft is improving in depth. The quartz we took from the greatest depth, which is about 50 ft., looks very well, and from the present appearance the streak of gold is dipping to the west. If so, we will have a great quantity of good quartz to take out. We are still pursuing the Hall lode, but have not yet come across another of those rich deposits which I have been anticipating."

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

ALTEN AND QUÆNANGEN MINING COMPANY.—The advices recently received from these mines are of the most satisfactory character, several important discoveries of ore having been made. At Quænangen one deposit has been opened upon for 5 fathoms in length and 4 fathoms in width, and the wall of the lode not yet reached. The whole mass is a compact body of ore, of an average of 7 to 8 per cent., and improves in appearance the deeper it is worked. Another discovery is that of a lode containing rich ores of 20 per cent.; and the agent states there is no doubt they have discovered a most valuable property. The other mines have also improved. It is confidently expected that the returns will be considerably increased.

GOLD IN WALES.—Castell Carn Dochan returned for the week ending Oct. 11, 3 ozs. of Gold, from 18 cwts. of quartz.

MOUNT PLEASANT GOLD MINE (Mold).—We learn that the expectations entertained with regard to this mine, as stated in the Journal a few weeks ago, have been fully realised, some fine beds of ore having been found, from which many tons have already been brought to surface. It is expected that not much less than 50 tons will be ready for sale before the end of the month.

DEVON COPPER (Okehampton).—The important discovery recorded at this mine has been steadily developing itself during the last few weeks. Operations have been confined to testing the great lode by sinking a shaft and driving an adit level upon it. In both cases only a few feet of the north, or least orey, part of the lode being carried for the sake of rapid driving, &c.; but as the lode at surface is over 20 ft. wide, and much more orey to the south, a cross-cut was put into the lode in the adit at a point where it is about 12 fms. from surface, chiefly as a guide to future operations. The result proved even more satisfactory than was expected, for not only does it show that this great lode maintains its size and strong masterly character but three distinct courses of ore were intersected, besides good saving work distributed through the lode. About 16 ft. have been cut through, and there is still more lode, and great hopes of more ore to the south. It is difficult at present to set a value on the ore laid open, but, from the discovery at such a shallow depth, there is good ground to believe that the mine will very quickly begin to pay its way, if not to return considerable profits.

NORTH CHIVERTON.—A parcel of 50 tons of blende has just been sold realising 5*l.* 12s. per ton. This is the second parcel sold from this mine since its commencement a short time since. Regular sales of both blende and lead will now be made. The mine is opening up exceedingly well, and is likely to add another productive mine to the Chiverton district.

MINING IN PERRANZABULOE.—I was glad to see, in last week's Journal, reference made to WHEAL GOLDEN and PENHALE MINES, in this parish. I have had opportunities, both during the late working and subsequently, of obtaining authentic information as to the prospects, and I think I may safely come to the conclusion that capital may profitably be invested in this undertaking. True one can now get good interest for money, but better, I am of opinion, may be had by investing in some good mines. I think the suggestion of Mr. Gibbs that two of the Financial Company should accompany him to inspect the property is good, and I feel assured that neither the directors or secretary will regret their journey.—JOHN GOUNE: *St. Agnes, Oct.* 12.

EAST WHEAL LOVELL.—The sinking of the engine-shaft on the rich north lode is satisfactorily progressing, and when completed the resources of the mine will be economically and vigorously developed. It must be recollected that the returns have not decreased by the diminished productiveness of the mine, but from the mere partial suspension of operations during the sinking of the shaft, as recommended by Captain Charles Thomas.

SOUTH DARREN.—A valuable discovery has been made in this mine. A cross-cut was put out north in the 20 west, and at 15 feet a good course of ore has been found, showing the rich lode in the 30 and 40 is holding up. The 50 and 60 are being driven up under this ore ground.

PROSPER UNITED.—These mines are looking better than appears to be generally known. The ore discovered is fully equal to, if not more than, that taken away; and when the new engine is at work at Hand's shaft, it is said that ore ground will be laid open more rapidly, and the returns considerably increased.

ROARING WATER.—The lode recently cut in the 20, at Grady's shaft, continues to improve, producing beautiful rich gossan, ruby copper, purple ore, and grey copper ore, rich with silver. A box of these rich ores, taken from the lode on Wednesday last, may be seen at the office.

WEST VOWNAG.—The sinking of the shaft below the 15 fm. level goes on steadily, the men making fair progress, so that it is hoped two months will complete it to the next level for commencing operations there. The pitch for raising lead in the stopes at the 15 is let again at the same tribute—2*l.* per ton of lead, which leaves the very unusual profit of more than 10*l.* per ton, after paying all mine changes and royalty.

At EAST WHEAL GRENVILLE, the 75 fm. level is now about 3 fathoms behind the point at which the ore came in at the 65 fm. level. This distance will be driven in about ten days or a fortnight: but from the present favourable appearance of the ground, it is probable that ore will be met with before that time. The sampling on Tuesday week will be about 200 tons of copper ore, and the mine will also sell from 10 to 11 tons of tin for the quarter.

GREAT DEVON AND BEDFORD MINING COMPANY.—The accountant of Mr. Brillman's estate, in the published balance-sheet, having estimated twenty shares in the Great Devon and Bedford Copper Mining Company as "worthless," we have been requested by the secretary of the company to publish the following explanatory statement:—The property is freehold, and adjoins the Devon Great Consols. The capital of the company consists of 10,000 shares, of 2*l.* 10s. each. The portion called up is 20,500*l.* Of this number, 5399 shares are held by original allottees, 3954 are transferred, and held at an aggregate premium of 4553*l.* 19s. 2d.; 193 at a discount of 107*l.*; and 449 at par. Copper ore is being obtained at the 30 fm. level, yielding 39 per cent. upon assay; and two important lodes—a north and south underlie—are upon the point of being intersected in the 40 fm. level. The prospects of success are in no respect diminished.

THE OLD WHEAL NEPTUNE MINING COMPANY.—Thirty shareholders of this company, holding upwards of 4200 shares (the number issued by the company being 7222), have sent a requisition to the liquidators, requiring them to call a meeting of the contributories, to pass resolutions, subject to the sanction of the Court, authorising the payment by Mr. White of the company's creditors, that gentleman having agreed to do so if appointed sole liquidator.

STRIKE AT THE BEREHAVEN COPPER MINES.—It is much to be regretted that the hitherto peaceable district of these extensive and wealthy mines has become disturbed. The principal site of the mines is a valley at the northwest of Castletown Bere, about seven miles, looking out on the Bull Rock and the famous Skelligs. At the northern side of the valley are the works of the oldest date, lining the rugged sides of Sleane Muskish, known as the "Mountain Mine," under the supervision of Captain Henry Pascoe, assisted by Captains Martin and Danniell. The southern portion, called Kealogue, is worked by Captains Ham and James Reed, over whom presides Captain John R. Reed, principal agent, whose duty it is more immediately to conduct the surface operations of the entire establishment in all their various branches, from raising the ore to shipping it fully prepared for market, whilst Captain Pascoe discharges the equally arduous duty of conducting the underground work of the whole, Kealogue having been recently placed under his charge. It is a patent fact that the miners could, with two-thirds of the labour, at Kealogue earn as good wages as the Mountain miners. Captain Pascoe, desirous to improve this for the interests of the proprietors, and redress certain other grievances, applied himself with his usual energy and devotion to his work. Some months since he introduced the hours of work and all other rules of the Mountain Mine to the Kealogue Mine. At first the two under agents objected, but after very stubborn resistance yielded, not, however, until Mr. Puxley, the proprietor, insisted on their submission to what was so reasonable, and in no wise an innovation,—the observance of one set of rules and regulations in the entire mines. After a few weeks these miners, in whom lax supervision had induced bad habits, showed that they felt it irksome to work so industrously and submit to the same restrant as their fellow-miners of the Mountain, and to a man refused to acknowledge any other agents but Captain James Reed or Captain Ham. On Saturday, not a single contract was taken at Kealogue. Mr. Puxley, as proprietor, Mr. J. W. Payne, J.P., and Dr. Armstrong, J.P., attended, and fully investigated the affair. It was manifest the miners were indulging the most wanton spirit of insubordination, and what was much to be regretted, it was not perceptible that their favourite agents used any efforts to prevent it. Some of the ringleaders were dismissed permanently, and other measures adopted, but to no avail. The mob, for such it became, then threatened violence to the Mountain men, who had taken contracts, if they should resume work on Monday. To meet this critical juncture, all the available police of the district were ordered out, who, with Mr. Jackinson, S.I., were under arms at the Mountain level by six o'clock on Monday morning. They were soon joined by sixteen of the coast-guard men, under Mr. Greet, and a considerable number of special police. Dr. Armstrong, J.P., accompanied by several of the mine agents and other friends, were present. The arrangements were excellent, altogether unexpected, and had the most telling effect, not a solitary disaffected person appearing there. Towards noon the Kealogue office became the centre of attraction. Mr. Puxley, Dr. Armstrong, the agents, and other officers were surrounded by several hundred of idle, sullen, and threatening men. Nor were they long alone, for the efficient and excellent officer of police with his party, backed by the blue-jackets, &c., armed to the teeth, were in attendance. Mr. Puxley having addressed the crowd, and Captain Pascoe read the rules or bye-laws, after some delay, a few contracts were taken by Mr. Puxley's tenants. The ice once broken, soon gave way, and every contract was taken. The day was carried by the judicious arrangements, the firm position taken by Mr. Puxley, combined with a conciliatory disposition. Work was resumed on the following morning. The Berehaven Mines have been worked for the last half-century, and bid fair for an equal term. Few who have not seen them can form an adequate idea of their extent; but their importance amongst the industrial resources of our country is felt and acknowledged far and wide—hence the thriving character of Castletown and the villages of Cluin and Eyeries. Mr. Puxley, the spirited and wealthy proprietor, proposes forthwith to spend the sum of 30,000*l.* in opening another branch of the mines, and adopting other measures for the more efficient working of the entire establishment. How futile and foolish the suicidal act of the workmen in resisting him and those who carry out his remunerative ideas!

CORNISH PUMPING ENGINES.—The number of pumping engines reported for Aug is 35 They have consumed 1719 tons of coal, and lifted 13·0 million tons of water 10 fms. high. The average duty of the whole is, therefore, 51,000,000 lbs. lifted 1 ft. high, by the consumption of 112 lbs. of coal. The following engines have exceeded the average duty:—

	Millions
Boscawen—70 in.	55·8
Chiverton—Cookney's 60 in.	61·2
Cargoll Mines—Michell's 72 in.	59·3
Cook's Kitchen—50 in.	54·5
Crane—70 in.	65·0
Great Wheal Busy—Harvey's 85 in.	62·9
Great Work—Leeds' 60 in.	64·9
North Roskear—Doctor's 70 in.	54·8
North Wheal Crofty—Trevenson's 80 in.	57·8
South Wheal Frances—Marriott's 75 in.	58·7
West Caradon—Elliot's 50 in.	59·1
West Wheal Seton—Harvey's 85 in.	63·8
Wheal Ludcott—Willcocks' 50 in.	51·8
Wheal Margery—Welsley's 45 in.	57·9
Wheal Seton—Tilly's 70 in.	56·4
Wheal Tremayne—Michell's 60 in.	54·2

*** With the Journal of Oct. 1 we gave a SUPPLEMENTAL SHEET, which contained the third paper on the Present Condition of the Labour Market; the New Turkish Mining Laws; the Mineral Wealth of Turkey; Economic Treatment of Aluminium; Researches for a New Theory of Geology; the Simplicity of the Creation; Natural Ventilation Interpreted and Practically Applied; an Electric Telegraph without Wires; Electric Light; New Alloy for Bells; Wheal Penrose Lead Mines; the Hot Springs of Cornwall; the New Light; New Quartz-Mill in Nevada; a New Red Light; Plaster of Paris for Paint; Meetings of the Tin Hill and Caradon Consols Mining Companies; New Inventions; Improved Safety-Cage; Treating Tar, and obtaining Products Therefrom; Extracting Precious Metals from Lead; Prices of Materials; Reports from Foreign Mining Companies; New Mining Company Law in Australia; Water Rights, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, OCT. 14, 1864.

COPPER.	£	s.	d.	£	s.	d
Best selected....p. ton	99	0	0	101	0	0
Tough cake..... „	96	0	0	98	0	0
Tile ..... „	96	0	0	98	0	0
Burra Burra .... „	91	0	0	92	0	0
Copper wire .....p. lb.	0	1	1	–	—	
ditto tubes ..... „	0	1	1½	–	—	
Sheathing & bolts p. ton	101	0	0	102	0	0
Bottoms ..... „	112	0	0	—	—	
Old (Exchange).... „	91	0	0	—	—	

IRON.	Per Ton.					
Bars Welsh, in London..	7	17	6	—	—	
Ditto, to arrive	7	15	0	7	17	6
Nail rods	8	15	0	—	—	
„ Stafford. in London	9	10	0	—	—	
Bars ditto	9	10	0	—	—	
Hoops ditto	10	0	0	11	0	0
Sheets, single	11	0	0	11	10	0
Pig No. 1, in Wales....	4	10	0	—	—	
Refined metal, ditto....	4	0	0	5	0	0
Bars, common, ditto....	7	0	0	—	—	
Do., merch., Tyne or Tees	8	5	0	8	10	0
Ditto, railway, in Wales	7	0	0	7	10	0
Ditto Swed. in London.	12	0	0	12	5	0
To arrive	12	5	0	—	—	
Pig, No. 1, in Clyde....	2	12	3	2	18	6
Ditto, f.o.b. Tyne or Tees	2	16	0	2	18	0
Ditto, forge, f.o.b. ditto..	2	15	0	—	—	
Railway chairs.....	5	10	0	5	15	0
„ spikes.....	11	0	0	12	0	0

LEAD.						
English Pig, ordny. soft	20	5	0	21	10	0
Ditto (WB)	22	10	0	—	—	
Ditto sheet	21	15	0	—	—	
Ditto red lead	22	0	0	—	—	
Ditto white	26	0	0	26	5	0
Ditto patent shot	23	0	0	—	—	
Spanish	19	10	0	—	—	

BRASS.	Per. lb.
Sheets	9¼d.-10d.
Wire	9¼d.- 9¼d.
Tubes	9d.-10d.

FOREIGN STEEL.	Per Ton.					
Swedish, in kegs (rolled)	15	10	0	15	16	0
„ (hammered).	16	0	0	18	0	0
Ditto in faggots.....	17	0	0	18	0	0
English, Spring	19	0	0	23	0	0
Bessemer's, Engineers Teel	44	0	0	—	—	
„ Spindle	30	0	0	—	—	
QUICKSILVER (per bottle).	8	0	0	nom.		

SPELTER.	Per Ton.					
Foreign	23	0	0	23	5	0
To arrive	23	5	0	—	—	

ZINC.						
In sheets	28	0	0	—	—	

TIN.						
English, blocks 101	0	0	—			
Ditto, Bars (in barrels)..102	0	0	—			
Ditto, Refined.....106	0	0	—			
Banca	98	0	0	—		
Straits	96	0	0	97	0	0

TIN-PLATES.*						
IC Charcoal, 1st qua. p. bx.	1	8	0	1	11	0
IX Ditto 1st quality „	1	14	0	1	17	0
IC Ditto 2d quality „	1	6	0	1	8	0
IX Ditto 2d quality „	1	12	0	1	14	0
IC Coke ..... „	1	3	0	1	5	0
IX Ditto..... „	1	9	0	1	11	0
Canada plates ....p. ton	13	10	0	—	—	

In London; 20s. less at the works.

Yellow Metal Sheathing, p. lb.	8¼d.- —					
Sheets .....p. lb.	8¾d.-					
Indian Charcoal Pigs in London	7	0	0	7	10	0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—The state of the Metal Market is less satisfactory than it was last week; the almost daily failures which are taking place in the commercial world are beginning to cause considerable anxiety, and to produce a want of confidence generally, which is very detrimental to business; and unless some change for the better takes place before long, and the Money Market becomes somewhat easier, we fear that even more serious consequences will ensue. It is somewhat favourable, however, that no advance was made in the Bank rate on Thursday last, as had been anticipated in some quarters; but still there is no certainty that it may not go up to 10 per cent. even now, in which case the present depressing influences would be considerably aggravated. In the metal trade business is exceedingly limited, indeed the past week has been more barren of business than any that has passed for a length of time. Buyers appear quite indisposed to give out their orders in the present state of uncertainty, except at limits which sellers are not inclined to accede to. Indeed, it seems on all hands that the disposition is to wait to see whether the clouds which now hang so gloomily over commercial affairs may not, ere long, pass over, and a brighter and more cheering aspect arise. It is earnestly to be hoped that this may be the case, and that the present year may not be brought to a close under the present unfavourable auspices.

COPPER.—The market continues in a very depressed condition, and business can be done much under the official quotations; a fall in the standard of ores of about 2*l.* has occurred, and it is by no means improbable that a fall in prices will be announced ere long. Burra has been sold at 91*l.*

IRON.—The quarterly meetings of the South Staffordshire ironmasters have been held during the week at Wolverhampton and Birmingham; at both places the attendance was far from numerous, and the present circumstances of the trade appear more unsatisfactory and depressing than has been experienced for a considerable time. The colliers' strike continues to have a most damaging effect upon the trade, and the mischief arising from it is being felt increasingly every day, and it is thought that under the most favourable circumstances it will be a long time before the district recovers from the shock. The ironmasters appeared not particularly anxious to take orders while there is so much uncertainty as to their execution, which must necessarily be the case if the strike continues. It was stated at the meetings that the principal ironmasters are moderately supplied with orders, but it was thought if the strike were over, and the colliers at work, there would not be sufficient to keep the works in full operation, the demand on account of the export trade being limited. The prevailing opinion with the ironmasters was that the colliers' strike would soon be at an end. In Welsh the iron trade maintains its vitality, and there are no complaints of want of orders, nearly all the principal ironmasters having their books filled for some time to come. In Swedish iron there is no alteration. The Scotch pig-iron market has continued gradually to decline during the week, caused in some measure by the pressure of forced sales for early settlement. The last advices from Glasgow state that the market opened flat at 51s. cash, but improved to 51s. 3d. cash, closing quietly after a moderate business rather sellers at same price, and at 52s. 9d. to 53s. three months.

LEAD in very moderate demand, and prices remain without alteration.

TIN.—No improvement has taken place in foreign, the market still tending downwards. Straits has been sold at 97*l.*, but business can now be done at 96*l.* Banca in Holland is quiet at 60½ fls.; 700 slabs have been sold at this price, and lots are still offering at the same figure.

SPELTER continues very dull and inactive, and transactions are exceedingly limited. The nominal price for parcels on the spot is 23*l.* to 23*l.* 5s.

STEEL without improvement.

TIN-PLATES.—The works are in fair employ, but there is nothing like activity shown. QUICKSILVER obtainable at the quotation.

GLASGOW, OCT. 13.—The market has again been depressed to-day, and a further decline in warrants took place—51s. cash, and 52s. 6d. three months, having been accepted. Early afterwards, however, 51s. 3d. cash was paid, and iron was freely offered at this at the close. No. 1, g.m.b., 52s.; No. 3, 51s.

SCOTCH MATTERS.—Encouraging advices reach us from Barrhead. Thus the Dunterlie forges are working early and late, whilst the extensive works of the Nitshill Iron Company have never been busier than they have been for some weeks past.

BIRMINGHAM, OCT. 14.—Rylands' "Iron Trade Circular" reports a large attendance at the quarterly meeting of ironmasters, but a comparative repose in trade, from the stagnation in the Money Market, the strike of the colliers, and the enforced caution of buyers. Large supplies of coal to the district, by rail, are keeping the works going. Prices firm, as before; merchant bars, 8*l.* 10s.; hoops, 9*l.* 10s.; sheets, single, 10*l.*; double, 11*l.* 10s.; lattens, 13*l.*; angles, 8*l.* 15s. to 9*l.*; gas strips, 8*l.* 5s. to 8*l.* 15s.; nail sheets, 9*l.* to 9*l.* 10s.; Welsh bars, 7*l.* 5s. to 7*l.* 15s., at works; pigs, common, 3*l.* to 3*l.* 5s.; mine pigs, 3*l.* 10s. to 3*l.* 15s.; better class, 4*l.*; hydrates, 4*l.* 10s. to 4*l.* 15s.; hematites, 3*l.* 10s. to 4*l.* 5s.; Yorkshire, 3*l.* 5s. to 3*l.* 12s. 6d.; common melters, 3*l.* 5s. to 3*l.* 10s.; Staffordshire, 3*l.* 5s.; spiegeleisen, 6*l.* 15s.; puddled steel, 12*l.* 10s. per ton; cast-steel blocks (raw), 1*l.* 6s. per cwt.; cast, hammered, 1*l.* 14s.

COAL MARKET.—On Monday, the arrivals (25 ships) were insufficient to meet the requirements of the trade, and the whole quantity was cleared off at an advance of 3d. per ton on house coal; Hartley's and manufacturers' fully sustaining previous quotations. Best house coals, 21s. to 21s. 6d.; seconds, 19s. 3d. to 20s. 3d.; Hartley's, 18s. to 19s.; manufacturers', 14s. to 17s. per ton.—On Wednesday 68 ships arrived. The demand was steady for all descriptions of coal at fully last day's prices.—On Friday 27 ships arrived. The market continued a steady business at last prices. Hetton Wallsend, 21s. 6d.; Hartlepool Wallsend, 21s.; Braddyll's Hetton Wallsend, 20s. 6d.; Heugh Hall Wallsend, 20s. 3d.; Harton Wallsend, 19s. 9d.; Hasting's Hartley, 19s. 3d.; Bute's Tanfield, 15s. per ton: three cargoes unsold; 30 ships at sea.

BOSTON, SEPT. 26.—There have been sales of English Cannel Coal in small lots, at $28 to $28·53 per ton. In Sydney and Pictou nothing of any consequence has been done. Anthracite is unsettled, and sales of $14 to $15 per ton, in retail lots. The market for Scotch Pig-iron is dull, and the sales have been small at $75 to $77 per ton, cash, for Gartsherrie and other brands No. 1; and American pig, at $75 to $77 per ton, cash. Bar and sheet iron are very quiet, and prices are nominal. In sheet iron nothing has been done.

NEW YORK, SEPT. 28.—The enquiry for domestic Coal has proved very light, and prices are $2·25 to $2·50 per ton more, and the market is very unsettled at the close. Foreign is inactive, and much lower. A few sales have been of gas coals; but on terms not made public. The regular monthly auction sale of 25,000 tons Scranton and Lackawanna coal came off as announced to-day, and resulted in a general decline of $2·26 per ton on the entire offering. All that remains now is for the people at large to use every effort to force the retail price down $3 per ton of from 1400 to 2000 lbs., as the company's sale have gone off at a decline of $2·26 per ton of 2240 lbs., which is the only ton known to commercial notions.

PHILADELPHIA, SEPT. 30.—The Iron Trade continues almost at a standstill, and iron, like all other staples, is unsettled and lower, with no disposition on the part of consumers to purchase, except to supply immediate wants, and quotations in the present unsettled state of the markets are merely nominal, there being too little doing in either pig or manufactured iron to establish prices. Copper is but little enquired for, and prices are nearly nominal. The Scranton Coal sale, showing an average decline of $2·25 per ton, has completely unsettled the market, and prices here are lower and tending downwards; buyers are holding off for a corresponding reduction before operating, and there is little or nothing doing in the way of sales.—*United States Railroad and Mining Register.*

The MINING SHARE MARKET presents no particular change; there is very little business doing, and quotations for the most part are merely nominal. Where business is transacted from the pressure of shares on the market prices give way, and it is with difficulty that sales are effected; but, on the other hand, it is also observed that when a little demand arises for any particular shares it is almost impossible to get them at the low quotations. East Grenville shares have been flatter this week, and leave off 7¼ to 7½. There are now about 3 fathoms more to drive in the 75 to get under the perpendicular of the ore in the 65; indications in the 75 are better than they were in the upper level, and, as the ground is very easy, the ore must soon be met with now. Wheal Grenville shares are also flatter, at 6¼ to 6¾. West Seton, 210 to 215; at the meeting, held on Tuesday, the accounts showed a profit on two months of 1604*l.* 18s. 6d., and a dividend of 1600*l.* (4*l.* per share) was declared, leaving 783*l.* 17s. 11d. in hand. The ores sold, and to be credited to next account, amount to 5254*l.* 5s. 8d. The mine is improving, and the ends worth in the aggregate 33 tons of copper ore per fathom, and 30*l.* per fathom for tin. On the new north lode, the 100, east of shaft, and east of cross-cut, is worth 5 tons of ore per fm. The 110 cross-cut is by estimation 12 fms. short of the lode, and expected to be cut in five months. The 120 cross-cut, driving north on the cross-course, will probably intersect this lode in two months. East Caradon, 25½ to 26½, ex dividend of 17s. per share, declared at the meeting on Wednesday.

Marke Valley, 4 to 4¼; at the meeting, on Wednesday, the accounts showed a balance in favour of the mine of 1288*l.* 15s. 10d., and a dividend of 1s. 6d. per share (675*l.*) was declared. The report of the mine is good. Salisbury shaft is down 112 fms. On Marke's lode the 100 east is worth 1¼ ton per fm.; west, 2 tons; winze, 3 tons.—Rosedown Lode: The 90 west, 2 tons; the 80 west, 3 tons; and the midway level west from 3 to 4 tons per fathom. Altogether, the discoveries are quite equal to returns. Wheal Crebor, 40s. to 42s. 6d.; Cock's shaft is down 6¼ fms. below the 96; the lode is 6 ft. wide, with every promise of a rich course of ore shortly. The 96 east is worth 2 tons of ore per fm.; the stope east of winze, 6 tons per fm.; the 72 east, 2½ tons; this is in virgin ground, 40 fms. further east than any of the other levels. The 96 west has a lode 7 ft. wide, worth 40*l.* per fm. for copper ore—lode best in bottom of level. The mine, the agent says, never looked so well before; and, taking its general prospects, with its situation adjoining Devon Great Consols, there is nothing like it in the market at its price, and nothing but the times have kept shares down. At 2*l.* per share it is 12,000*l.* only for the mine, while others with no better prospects are selling at three times this amount. Clifford Amalgamated, 30 to 31; Cook's Kitchen, 13 to 15, and the mine said to have improved.

Carn Camborne, 32s. to 34s.; at the meeting the accounts showed assets over liabilities of 312*l.* 5s. 1d., and a call of 2s. per share was made; the report states the south lode has been intersected at the 40 east end, producing 2 tons, and west end 2½ tons per fathom; the 30 east 1 ton, and west 1 ton; the mine, on the whole, is looking very encouraging, and has improved since last meeting. East Basset, 60 to 62; East Carn Brea, 6½ to 7; East Lovell, 8½ to 8¾; East Russell have been flat, but leave off better at 4½ to 5; Great Laxey, 15 to 16; Great Vor, 28 to 29; Hallenbeagle, 3⅞ to 4⅛; Hingston Down, 3⅞ to 4⅛; North Basset, 30s. to 35s.; North Downs, 17s. 6d. to 20s.; North Roskear, 20 to 21; North Treskerby, 3 to 3½; Providence Mines, 36 to 38; South Condurrow, 32s. 6d. to 35s.; South Grenville, 9s. to 11s.; Tincroft, 14½ to 15½; Vale of Towy, 4s. 6d. to 5s. 6d.; West Caradon, 6 to 7; West Tolgus, 55 to 60; Wheal Basset, 89 to 91; Wheal Buller, 12 to 14; Wheal Mary Ann, 16 to 17; Wheal Seton, 202½ to 207½; Wheal Trelawny, 19 to 20; Alten, 2 to 2½, and enquired for; Prince of Wales, 4s. to 5s. West Chiverton, 55 to 60; the 80 west, on Williams's lode, is reported worth 60*l.* per fathom; in the 90 fathom level cross-cut they expect to cut the first lode in about a fortnight. The sale of ore, on the 12th, was 50 tons of lead, at 21*l.* 1s. 6d. per ton; 70 tons, at 9*l.* 5s. per ton. Wheal Chiverton, 5½ to 6; we understand the progress in clearing Murray's shaft is now more satisfactory.

On the Stock Exchange a moderate amount of business has been transacted in Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—East Caradon, 27½; North Downs, 1; Clifford, 30; Great Wheal Vor, 28⅜, 28¼, 28; Wheal Mary Ann, 16; East Grenville, 7½; North Wheal Basset, 1½; West Caradon, 5; Great Laxey, 15½. In Colonial Mining Shares the prices were:—Yudanamutana, 1⅛, 1⅜, 1½, 1⅝; Scottish Australian, ½. In Foreign Mining Shares the prices were:—Cobre, 27, 27½; St. John del Rey, 36; United Mexican, 4½, 4⅝; Panulcillo, 1½.

The Atlantic and Great Western Railway Company have issued a prospectus for the raising of $4,000,000 on second-mortgage bonds of the Ohio division. The interest which, inasmuch as the bonds are issued at 34 per cent. discount, is equal to 9½ per cent. per annum, will be payable in London half-yearly, on Jan. 1 and July 1. The bonds are issued at 4s. per $1, and, therefore, cost 148*l.* 10s. for the $1000 bond, and are redeemable in 1883 in New York or in London at 4s. 6d. per $1. The railway has already achieved an extraordinary degree of success, and it is mentioned that the whole line is now fully ready for business, and thoroughly ballasted, but the demand for rolling stock has been so far in excess of anticipation that adequate provision for it has not been made, and 200 miles of the main line has remained shut up until now. The prospectus also states that "as the entire through traffic to and from New York will pass over the Erie Railway, it is but reasonable that that company, which will so largely benefit, should furnish a portion of the rolling stock, and to meet this a treaty has been made with the Erie directors for the expenditure of $5,000,000 in the construction of engines and cars. The entire amount is now under contract for rapid delivery, and as received will be used exclusively for the through traffic over the Atlantic and Great Western Railroad, the latter company on its part agreeing to supply a similar quantity for the same purpose." The estimates show an ample revenue to meet the interest thrice over; and, as the railway is already completed, there is much to recommend the bonds to the attention of capitalists. The $1000 bonds are to be paid for 5 per cent. (11*l.* 5s.) upon application; 10 per cent. upon allotment; 15 per cent. upon Nov. 19; 15 per cent. on Dec. 19; and 21 per cent. on Jan. 19, the subscriber being entitled to deduct 7*l.* for the January coupon out of the last instalment. The prospectus will be found in another column.

At Redruth Ticketing, on Thursday, 2403 tons of ore were sold, realising 13,258*l.* 12s. 6d. The particulars of the sale were:—Average standard, 119*l.* 7s.; average produce, 6⅞; average price per ton, 5*l.* 10s. 6d.; quantity of fine copper, 166 tons 9 cwts. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	Ore copper.
Sept. 8....	2083	£124 6 0	6¾....	£5 5 0	16s. 4d.	£81 12 0
„ 22....	4506	130 16 0	5⅞....	4 12 6	16 5	82 1 6
„ 29....	3683	123 19 0	6¼....	4 18 0	15 10½	79 9 0
Oct. 5....	3289	122 11 0	6¼....	5 2 6	15 11½	79 17 6
„ 13....	2403	119 7 0	6⅞....	5 10 6	15 11	79 6 0

Compared with last week's sale, the decline has been in the standard 15s., and in the price per ton of ore about 1s. Compared with the correspond-

ing sale of last month, the decline has been in the standard 2*l.* 10s., and in the price per ton of ore nearly 3s. 6d.

At the Swansea Ticketing, on Tuesday, 1332 tons of copper ore were sold, realising 15,850*l.* 1s. The particulars of the sale were—Average standard, 100*l.*19s.6d.; average produce, 14; average price per ton, 11*l.*18s.; quantity of fine copper, 186 tons 10 cwts. The following are the parcels of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	Ore copper.
Sept. 13	2067	£ 99 14 6	17½	£14 17 0	17s. 4d....	£86 14 0
Oct. 11 ...4	1339	100 19 6	14	11 18 0	17 4	85 0 0

Compared with the last sale, which is also the corresponding sale of last month, the decline has been in the standard 1*l.* 15s., and in the price per ton of ore about 4s. 8d. Of the 1332 tons of ore sold on Tuesday, 326 tons were British ores, which gave an average produce of 10½, and sold at an average standard of 104*l.* 4s.=8*l.* 13s. per ton of ore; the remaining 806 tons were foreign ores, which gave an average produce of 16½, and sold at an average standard of 99*l.* 13s. 6d.=14*l.* 0s. 6d.per ton of ore. There will be no sale on Oct. 25, and future sales will commence at 12 o'clock.

At the Dolcoath Mine meeting, on Monday (Mr. M. G. Pearse in the chair), the accounts for the two months showed a credit balance of 2817*l.* The profit on the working during that period amounted to 2167*l.* A dividend of 2148*l.* (6*l.* per share) was declared, and 699*l.* carried to credit of next account. The sales of tin realised 11,015*l.*, of copper ore 554*l.*, and of arsenic 54*l.*; the total, after payment of dues, being 11,110*l.* Dolcoath is no longer sold exclusively to the Messrs. Williams, as was the case for a long series of years. This tin is much prized, and during the past two months 90 tons—about one-half the produce of the mine—has been sold to the Williams's; 40 tons to the Redruth Co.; 25 tons to the Daubuz's, and 16 tons to the Calenick Co. (Bolitho's). The importance of a mine like Dolcoath in any neighbourhood can hardly be over estimated. Upwards of 1300 persons are constantly employed, and not less than 4000 persons depend on this mine for their daily bread. The average earnings of the men are now 3*l.* 5s. to 3*l.* 7s. 6d. per month. Their tin ground appears to be about 60 fathoms high, and worth on an average about 25*l.* per fathom,—apparently very much below the average value a short time since; but then the improved machinery on the mine for stamping and dressing meets to a great extent the falling off in the value of the stuff.

At Wheal Seton meeting, on Monday, the accounts for the two months showed a profit of 1727*l.* A dividend of 1584*l.* (4*l.* per share) was declared, and 120*l.* carried to credit of next account.

At the West Wheal Seton meeting, on Tuesday, the accounts showed a credit balance of 2383*l.* 17s. 11d. The profit on the working for July and August was 1044*l.*18s.6d. A dividend of 1606*l.* (4*l.* per share) was declared, carrying over 783*l.*17s.11d. The salary of Capt. Jennings was increased to 9*l.* 9s. per month. Captains C. Thomas, M. Dath, and J. Jennings reported that the tribute pitches throughout the mine are looking very well.

At the East Caradon Mine quarterly general meeting, on Wednesday (Mr. W. Fawcett in the chair), the accounts showed—Balance last audit, 1722*l.* 7s. 3d.; ore sold, 8840*l.* 14s. 9d.=10,563*l.* 2s.—Labour cost, 3054*l.* 9s. 1d.; dues, 447*l.* 3s.; incidental expenses, 49*l.* 19s. 5d.: leaving credit balance, 7011*l.* 10s. 6d. A dividend of 2222*l.* 8s. (17s. per share) was declared, and 1789*l.* 2s. 6d. carried forward to the credit of next account. The agent's report appears amongst the Mining Correspondence.

At the Bedford United Mines meeting, on Wednesday, the accounts showed a cash balance of 648*l.* 5s. 7d. A dividend of 2s. 6d. per share was declared. An estimated account of payments and receipts before the next meeting, to be held in January, represents the balance in favour of mine as 425*l.* 9s. 9d. Mr. Thomas Horswell is appointed purser and clerk at 10*l.* 10s. per month. Capt. Thomas Phillips says—"In the absence of any improvement during the past quarter the reserves have been lessened; but I hope the tutwork now in operation may result in discoveries which will not only enable us to maintain the present returns, but place the mine in a sound position."

At Marke Valley Mine meeting, on Wednesday (Mr. W. Fawcett in the chair), the accounts for June, July, and August showed a credit balance of 2029*l.* 7s. 10d. A dividend of 675*l.* (1s. 6d. per share) was declared. Captain Seccombe says—"The mine is looking well. I consider our discoveries quite equal to the returns; a better standard would place us in a more profitable position."

At the West Caradon Mine meeting, on Wednesday (Mr. R. Hallett in the chair), the accounts showed a credit balance of 1811*l.* Details in another column.

At the Wheal Grylls meeting, on Wednesday (Mr. Peter Watson in the chair), the accounts showed a debit balance of 895*l.* A call of 1*l.* per share was made. Details in another column.

At East Wheal Grylls meeting, on Wednesday (Mr. Peter Watson in the chair), the accounts showed a debit balance of 359*l.* 13s. 8d. Details elsewhere.

At Great Wheal Grylls meeting, on Wednesday (Mr. Peter Watson in the chair), the accounts showed a credit balance of 368*l.* 5s. 9d. Details elsewhere.

At Carn Camborne Mine meeting, on Wednesday (Mr. J. Wristbridge in the chair), the accounts showed a credit balance of 312*l.* 5s. 1d. Captain Seccombe submitted a report of the progress of the workings for the past three months, and his opinion of the prospects, which was highly encouraging. A call of 2s. per share was made.

At West Rose Down Mine meeting, on Wednesday (Mr. W. Fawcett in the chair), the accounts for the past three months showed a credit balance of 51*l.* 8s. 5d. A call of 17s. 6d. per share was made. A special vote of thanks was passed to Captain Seccombe, for "the very able, careful, and economical manner in which the mine is carried on by him."

At Drake Walls Mine meeting, on Oct. 5, the accounts for April, May, and June showed a credit balance of 688*l.* 8s. 2d. Capts. Gregory and Hoskin reported on the mine—"The continued long drought has completely dried up our water-courses from the shallow adits throughout the summer; consequently, all our stamps, and a portion of our other water machinery, have been, and are even up to the present time, idle for want of water. We have, therefore, immense quantities of skimpings and other refuge work now on the floors in readiness for the stamps. We are of opinion unless we get an increase of water shortly it will be advisable and quite necessary to put up steam-stamps, and attach the same to the steam-whim. The present low price of tin, from 16*l.* to 17*l.* per ton below the average of 1860, has a very serious effect on the low quality of tinstuff in tin mines. We have drawn to surface during the past quarter 15,571 waggons and kibbles of tinstuff. There are 361 persons employed in and on the mine. We have about 100*l.* worth of tungstate of soda ready for the market, together with a small parcel of copper ore, which we expect to sell in a few weeks." The meeting recommended to the committee the propriety of suspending operations at the bottom levels in the eastern part of the mine.

At the Coed Madog Slate Quarry meeting, on Oct. 5 (Mr. T. Stainton in the chair), the accounts showed—Capital, 7650*l.*—By purchase of quarries, plant, machinery, &c., 5467*l.* 17s. 1d.—General expenditure (including quarry costs, salaries, law, coal, &c.), 3304*l.* 10s. 10d. The receipts include sales of slates 632*l.* 18s. 9d. They have slates on hand valued at 299*l.* 15s. 4d.; and a cash balance of 189*l.* 7s. 10d. Capt. Thos. White, in his report, says—"We have erected engine and boiler-houses, &c., and have a 56-horse power condensing beam-engine in full work. Our present lift of pumps not being able to sufficiently drain the quarry, we have provided a complete new lift of 10½ pumps. A wall has been built 57 ft. high, 33 ft. long, and 27 ft. wide, and contains between 3000 and 4000 tons of stones. We carried the wall about 15 ft. above any of the old rubbish heaps, in order to get a good tip, and thereby lessen the expense of tramming. A railway has been laid for some time from the boiler-house, around where the manufactured slates are deposited, and communicates with the Nantile Railway—a great saving and convenience. Since you decided upon clearing the tops on the south side for 30 yards in width, and to widen the quarry, before commencing operations at the bottom, we have extended a railway from the landing-stage wall, to remove the tops accordingly, with which we are making very good progress. In the meantime, we were able, after the removal of some old buildings and rubbish, to work down about 5 yds. of the slate rock, the produce of slates from which is 454 tons 8 cwts. 1 qr., valued at 932*l.* 14s. 1d. After we get the 20 yards clear of top rubbish our working will be much more economical, and the returns greater. The slate rock still standing south of our present workings looks very well, and I feel confident that by-and-bye we shall have a very profitable quarry. The engine is a good one, and works admirably; in fact, all our machinery and appliances are now in perfect order, and we have sufficient plant on the quarry to carry on for some time without any addition, excepting a few rubbish waggons and rails."

At the Elbe Colliery Company (adjourned special) meeting, on Monday (Mr. J. W. L. Ilbery in the chair), unanimous resolutions were passed to the effect that the meeting fully approves and confirms the arrangements made by the directors with the holders of debenture bonds for the purchase thereof, by the company's payments for the same to be made in shares of the company (at par) for the amount of the said bonds, together with the overdue interest, and a premium of 20 per cent., calculated upon the amount of principal and interest thus—the debenture bonds amount to 77091.; interest six months' overdue, 485*l.*; 20 per cent. thereon, 20377.=12,222*l.* Also that the meeting fully approves and confirms the arrangements made by the directors with the proprietors of the royalty for the purchase of all their rights therein by this company; and also approves and confirms the mode of payment for the same. The arrangements made by the directors with the bank for a loan to the company of 4000*l.*, on the conditions set forth in a letter from the directors to the bankers (a copy of which was read to the meeting) were approved. The Chairman mentioned that a letter had been received from an eminent firm, not in any way connected with this company, which fully confirmed the report of their own secretary, "that the coal produced at this colliery is of the best quality of any produced in the basin." A vote of thanks to the Chairman terminated the proceedings.

Mr. George Harrison, late of the Millwall Ironworks, has been elected deputy-chairman of the Humber Ironworks Company, and will undertake the executive management, Mr. Samuelson having retired.

Newcastle-on-Tyne, Oct. 13.—The Mining Market during the past few weeks has been quiet throughout, the Money Market having an adverse effect, coupled with the fact of the very many mercantile embarrassments which have recently taken place. It must be particularly gratifying, however, to the investing public in mines to observe the extraordinary firmness of Devon Consols, South Caradon, Great Laxey, and a few others, as denoting the great stability of these concerns against the most overwhelming fluctuations in nearly, if not all, the recently-formed banks and financial companies, in which all have verified the saying that "Necessity tempts the poor man, and Avarice tempts the rich." West Chivertons have receded to the perfectly safe price of 55*l.* to 57½*l.* The 90 fm. level will be opened upon in a few days, when an advance must certainly take place in these shares. North Crofty, North Roskear, Wentworth Consols at 7½*l.* to 10*l.*, and Chiverton, at 6*l.*, are well worth attention to those who like to make a muckle out of a wee bit. Troedyrhiw is looking more cheering.—Edward Burwis.

Stamp Duties.—The stamp duty on letters of administration is to be calculated, not only on the principal moneys which constituted the property at the time of the intestate's death, but also on the accumulations of interest between the death and the grant of the letters of administration. The interest is an accessory to the estate, and arises out of it as its produce, and follows it as part of the property. This was the holding of the Court of Exchequer Chamber in the case of the Attorney General *v.* Partington.

Principal and Factor.—The plaintiff, in the case of Dresser *v.* Norwood, having timber for sale, placed it in the hands of a factor to sell on a *del credere* commission. The factor sold in his own name to the broker of the defendant. The broker knew that the timber was the property of the plaintiff, but did not disclose that fact to his principal. It was held by the Court of Exchequer Chamber in this action, which was brought for the price of the timber (reversing the decision of the Court below), that the defendant was not entitled to set off a debt due to him from the factor, inasmuch as he must have been presumed to have known that the goods were the property of the plaintiff, his broker having acquired such knowledge prior to the purchase.

Legal Rights.—The Court of Chancery can decide legal questions only so far as is necessary for the exercise of its own jurisdiction, and will not make a decree declaratory of rights under a legal instrument. Therefore, in the case of the Attorney-General *v.* Boyle, where the suit was instituted to restrain the defendants from executing works which would interfere with certain rights of parties under a lease to them by the defendants, and the defendants submitted to an injunction restraining them from executing the works, the Vice-Chancellor Wood held that the Court could not make a declaration of the rights of the plaintiffs under the lease, or grant an injunction in general terms to restrain the defendants from infringing those rights.

Trade Names.—The Court of Chancery does not recognise property in unpatented articles, and will not interfere to restrain the sale of spurious articles, though described to be the same as those manufactured by another, unless such articles are held out by the imitator to be the manufacture of that other person. In the case of Browne *v.* Freeman, the plaintiff had invented and sold a secret medicine, called chlorodyne, and the defendant advertised a spurious imitation of it as "the original chlorodyne." The evidence showed that the defendant's article was not mistaken for the plaintiff's, but only that the defendant was taken to be the first inventor. It was held by Vice-Chancellor Wood, under these circumstances, that the plaintiff was not entitled to an injunction to restrain the defendant from issuing such advertisements.

Great Wheal Vor.—The aggregate value of the different points of operation is considerably more than 1000*l.* per fathom. The lode at Ivey's shaft continues to improve, and is now worth between 250*l.* and 300*l.* per fm. The 152, west of Metal, continues its value, above 200*l.* per fm., and the 174 west has very much improved, now being worth about 50*l.* per fm. The 184 (the bottom level) is worth nearly 200*l.* per fathom. The 147, east of Ivey's, and the 147, west of Metal shaft, are both very productive; and, as those ends are within a few fathoms of each other, the important fact may be considered as established that there is one continuous and rich body of ore from Ivey's to Metal shaft.

The Mineral Wealth of Turkey.—We return to this interesting subject. Account must still be taken in Thessaly, on the spurs of Mount Pelion, in the neighbourhood of Zagorié (in the district of Volo), of mines of argentiferous galena, containing 1 to 4 per cent. of silver, as well as of copper minerals, carbonated in a greater degree. M. Xavier Heuschling states that the known bearings of Zagorié, as well as the mines which may still be discovered in this part of Thessaly, have been conceded to an English company. According to recent information which has reached us, we may add, that in consequence of the delays and difficulties with which it has met, this enterprise has not succeeded. Let us note, finally, that the existence of mines of argentiferous lead has been reported in the Ile de Chypre, in the neighbourhood of Mount Olympus. Copper is worked especially at Kreshovo and at Baja d'Arama, in small Wallachia; the minerals of this last mine, hitherto worked by the Austrians, contain, according to M. Heuschling, 25 per cent. of copper. From the most ancient times copper was worked in the Ile de Chypre. Pliny carries back the art of working mines in this island to the period of King Cyniras, who was a "contemporary" of the Trojan war. The Romans gave copper the name of cuprum, which recals the Ile de Chypre. The workings are now abandoned in this island, but they were formerly very considerable, judging from the immense mass of scoriæ found in the Olympian Mountains. Iron does not appear to have been worked in the Ile de Chypre. We might enumerate in Asia Minor 17 metallic mines, of which 10 are worked. M. de Tchihatcheff estimates in round numbers the production of the silver and copper mines of Turkey, in this district, at 554,870 okas, or 694 tons. According to M. Narcès Tarassenko-Otreschkoff, the mines of Erzercum, which have been worked only since the last thirty years, produced alone annually 11¼ tons of silver. The metal extracted is sent to Constantinople, where it is converted into money. The production of copper in Asia Minor was estimated by M. de Tchihatcheff, in round figures, at 965,520 okas, or 1206¾ tons per annum.

Cleveland Iron Trade.—State of the blast-furnaces of the district on Oct. 7:—

Place and owners.	In.	Out.	Total.
Eston—Bolckow and Vaughan	9	—	9
„ Clay Lane Company	6	—	6
„ South Bank Company	3	—	3
Cargo Fleet—Jones, Dunning, and Co.	2	—	2
„ Cochrane and Co.	4	—	4
„ Gilkes, Wilson, Pease, and Co.	5	—	5
Middlesbro'—Bolckow and Vaughan	4	—	4
„ Hopkins and Co.	2	—	2
Port Clarence—Bell Brothers	6	—	6
Norton—Warner, Lucas, and Barrett	3	—	3
Stockton—Holdsworth and Co.	3	—	3
Ferryhill—J. Morrison	3	—	3
Newport—B. Samuelson	2	1	3
Thornaby—W. Whitwell and Co.	3	—	3
Darlington—South Durham Company	2	1	3
Witton Park—Bolckow and Vaughan	4	—	4
Stanhope—Weardale Iron Company	1	—	1
Towlaw—Weardale Iron Company	5	—	5
Consett—Derwent Iron Company	8	10	18
Total	75	12	87

BLAST-FURNACES ERECTING.

South Bank, Eston	6, 3 far advanced.
Swan, Strawbenzie, and Co., Cargo Fleet	2, laid out for 4.
Tees Ironworks (Gilkes, Wilkes, and Co.)	2, far advanced.
Hopkins, Lloyd, and Co., Middlesbro'	4, near completion.
Bell Brothers, Clarence Ironworks	2, in progress.
(Foundation laid for four more.)	
Fighting Cocks (Middleton Iron Company)	2, far advanced.

Messrs. Fox, Head, and Co. are on the eve of commencing operations at their new plate-mills, at Newport; and Messrs. Barningham (Darlington Ironworks), are contemplating important additions.—*Darlington and Stockton Times.*

Glaisdale Ironworks.—At Grosmont, near Whitby, the first sod of new blast-furnaces was cut a few days ago for the above ironworks. The works are carried on under the management of Mr. Joseph Nicholson, engineer to the contractor, Mr. G. E. Forster, of Washington. Mr. Nicholson is about to commence a new branch railway from Beggar's Bridge to Winten Gill. The length of the line will be six miles. The work will be begun immediately. The engineers have finished the survey. The railway is to be constructed for Messrs. Snowdon and Co., ironmasters, Stockton-on-Tees.

Earl Granville's Ironworks.—Extensive additions are being made to Earl Granville's ironworks, at Etruria, by the erection of a large number of puddling-furnaces and rolling-mills. The new works will occupy both banks of the canal, and are close to the Hanley branch railway.—*Staffordshire Advertiser.*

Bwlch Iron Mine.—This promising mine, situated at Llanengan, near Pwllheli, on the property of Mr. D. Williams, of Deudraeth Castle, is now worked with much spirit and success by some London capitalists, under the name of the "St. Tudwell's Iron Ore Company," and as there is a tramroad from the mine to the shipping place at Penrhyn Du, it enables them to send off the ore, which is of excellent quality, at comparatively small cost. The mine was opened some years ago by the late Alderman Thompson, M.P., but it has not been worked since his death. The present working is likely to be of great benefit to the neighbourhoods of Llanengan and Abersoch, as well as to the owners of the property, who will derive from it a good royalty, in addition o a considerable annual payment by way of dead rent.—*North Wales Chronicle.*

LEAD ORES.

Sold on the 30th September.

Mines.	Tons.	Price per ton.	Purchasers.
Bronfloyd	30	14 11 0	Mining Co. of Ireland.
Sold on the 7th October.			
Harwood	10	£12 12 6	Shield & Dunning.
Sold on the 10th October.			
Frongoch	140	13 10 0	Panther Co.
East Darren	75	16 10 6	J. & J. Williams.
Cwm Erfin	25	17 6 6	Treffry's Trustees.
ditto	40	17 3 0	Sims, Willyams, & Co.
Sold on the 11th October.			
Wheal Mary Ann	46	27 18 6	ditto
ditto	30	11 4 6	Treffry's Trustees.
Sold on the 12th October.			
Twelve Apostles (blue ore)	30	13 15 0	A. Eyton.
ditto (white ore)	10	7 0 0	J. Hughes.
Sold on the 13th October.			
Talargoch (Macsyrerwddu)	19	14 12 6	Newton, Keates, & Co.
ditto (Coetia Llys)	106½	15 6 0	ditto
Deep Level	20	13 6 6	Walker, Parker, & Co.
Brynford Hall	9½	13 0 6	Brymbo Co.
South Kilmorey	8½	13 0 0	Walker, Parker, & Co.
Rhosesmor	60	13 18 6	A. Eyton.
ditto	55	13 17 6	ditto
Parry's	21	13 14 0	Walker, Parker, & Co.
Bryn Gwiog	45	14 8 0	A. Eyton.
Long Rake	30	13 12 6	ditto
Billins	15	13 16 6	Walker, Parker, & Co.
Merllyn	6	12 8 0	Newton, Keates, & Co.
North Henblas	15	12 4 0	Walker, Parker, & Co.
ditto	2	12 11 0	ditto
Pennant	12½	13 0 0	Brymbo Co.
Dog Pit	20	12 14 0	Newton, Keates, & Co.
Pwllgwen Llau	21	13 13 6	Walker, Parker, & Co.
West Fawnog	25	13 15 6	ditto
Llangynog United	42	12 17 6	ditto
Llanerchyraur	24¾	13 9 0	ditto
Roman Gravels	20	13 7 6	ditto
Caeconroy	11¾	14 10 6	Newton, Keates, & Co.
Dyfngwm	13	13 2 6	ditto
Dyliffe	48	13 11 6	A. Eyton.
Speedwell	8	12 0 0	Walker, Parker, & Co.

BLENDE.

Sold on the mine.

Mine.	Tons.	Price per ton.	Purchasers.
North Chiverton	50	£5 12 0	Vivian & Sons.

BLACK TIN.

Sold on the 7th October.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Prosper United	7 17 3 4	£59 15 0	£ 471 7 6	Bolitho & Sons.
ditto	2 1 1 1	50 0 0	103 3 0	ditto
Sold on the 7th October.				
Cornubia	4 11 2 17	64 0 0	293 5 8	Daubuz & Co.

COPPER ORES.

Sold at Liverpool, by Mr. James Lewis, on the 11th October.

Mines.	Tons.	Price per ton.	Purchasers.
West Canada Co. (ex *Saranac*)	70	£16 5 0	Pascoe, Grenfell, & Sons.
ditto ditto	70	16 5 0	ditto
ditto ditto	70	16 5 0	ditto
ditto ditto	65	16 5 0	ditto
ditto ditto	65	16 5 0	ditto
ditto ditto	65	16 10 0	ditto
ditto ditto	35	16 10 0	ditto

COPPER ORES.

Sampled September 21, and sold at Swansea October 11.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Cobre	120	13	£11 2 0	Cuba dust	109	14¼	£11 18 6
ditto	92	13⅜	10 17 0	Copper slag	101	14½	2 15 0
ditto	83	13¼	10 17 0	ditto	1	10¾	8 17 6
ditto	64	21⅝	18 6 6	Spanish ore	49	5	3 12 0
ditto	65	21¼	18 0 0	Cape Cop. Co.	44	38¾	33 1 6
ditto	67	18⅝	15 5 6	Cuba	2	60¾	48 8 0
ditto	14	50¾	42 5 0	Spanish	76	8¾	7 1 0
Berehaven	86	11⅝	9 14 0	British Reg.	27	17¾	14 0 0
ditto	83	11½	9 13 6	ditto	13	23¼	20 0 0
ditto	88	10½	8 18 6	Concordia	13	21¾	18 16 0
ditto	30	9¾	8 3 0	Kanmantoo	8	43¼	37 15 0
ditto	85	9⅝	8 2 0	British Reg.	12	26½	22 15 0

TOTAL PRODUCE.

Cobre	505	£7188	9 6	Cuba	2	£	96 16 0
Berehaven	372	3353	8 6	Spanish	76		535 16 0
Cuba dust	109	1299	16 6	British Regulus	40		638 0 0
Copper slag	102	286	12 6	Concordia	13		244 8 0
Spanish ore	49	176	8 0	Kanmantoo	8		302 0 0
Cape Copper Co.	44	1455	6 0	British Regulus	12		273 0 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Freeman and Co.	86	£1900 9 0
Grenfell and Sons	295	3220 15 0
Sims, Willyams, and Co.	115	1766 18 0
Vivian and Sons	404	4645 0 0
Williams, Foster, and Co.	240½	3461 5 9
Bankart and Sons	101	277 15 0
Sweetland, Tuttle, and Co.	90½	577 18 3
Total	1332	£15,850 1 0

NO SALE on October 25. In future the sale will commence at Twelve o'clock.

AVERAGES.

	Produce.	Price.	Standard.
British	10½	£ 8 13 0	£104 4 0
Foreign	16⅜	14 0 6	99 13 6
Sale	14	£11 18 0	£100 19 6

Totals—British, 526; Foreign, 806=1332 tons (21 cwts.)

AVERAGES OF LAST SALE.

	Produce.	Price.	Standard.
British	9¾	£ 8 3 0	£106 15 0
Foreign	22⅝	19 11 0	98 6 6
Sale	17⅛	£14 17 0	£ 99 14 6

Totals—British, 851; Foreign, 1216=2067 tons (21 cwts.)

COPPER ORES.

Sampled Sept. 28, and sold at Tabb's Hotel, Redruth, Oct. 13.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
West Basset	65	£7 0 0	Rosewarne Consols	17	£4 9 0
ditto	63	6 3 6	West Fowey Consols	61	10 7 0
ditto	60	4 17 6	ditto	60	3 13 6
ditto	59	3 17 0	Charlotte United	70	3 12 0
ditto	58	7 8 6	ditto	49	7 10 0
ditto	37	3 16 6	Par Consols	75	6 2 0
ditto	35	10 12 0	ditto	42	3 13 6
ditto	28	4 3 6	Rosewarne United	63	4 14 6
Carn Brea	61	8 3 6	ditto	33	9 18 0
ditto	52	5 2 6	Copper Hill	52	1 11 0
ditto	50	3 18 6	ditto	38	7 5 0
ditto	48	2 18 6	Great South Tolgus	47	7 17 6
ditto	47	4 3 6	ditto	38	5 6 0
ditto	44	3 4 6	West Alfred Consols	56	1 2 0
ditto	37	4 4 0	Bampfylde	52	13 12 6
ditto	31	8 2 0	Wheal Anna	22	4 19 6
ditto	25	1 11 6	ditto	15	2 0 0
Prosper United	79	2 3 0	South Carn Brea	34	5 4 0
ditto	75	1 16 6	Wheal Vyvyan	16	2 12 6
ditto	68	5 1 0	ditto	9	6 6 0
ditto	61	4 8 6	ditto	1	19 7 0
ditto	41	2 17 0	South Dolcoath	24	12 10 0
East Carn Brea	63	7 10 0	Wheal Agar	7	4 0 0
ditto	45	4 2 6	Tehidy	15	6 17 6
ditto	42	2 14 0	North Frances	14	4 3 6
ditto	38	2 11 6	Boiling Well	10	1 6 0
ditto	23	3 15 0	Boswidden	6	4 0 0
ditto	22	6 18 6	ditto	2	23 0 0
Rosewarne Consols	45	13 12 6	ditto	1	45 5 0
ditto	40	11 5 0	Camborne Consols	5	1 10 0
ditto	27	7 8 6			

TOTAL PRODUCE.

West Basset	405	£2423	15 0	West Alfred Consols	56	£	61 12 0
Carn Brea	395	1885	16 6	Bampfylde	52		708 10 0
Prosper United	324	1036	18 0	Wheal Anna	37		139 9 0
East Carn Brea	233	1107	19 6	South Carn Brea	34		176 16 0
Rosewarne Consols	129	1339	5 0	Wheal Vyvyan	26		118 1 0
West Fowey Con	121	851	17 0	South Dolcoath	24		300 0 0
Charlotte United	119	619	10 0	Wheal Agar	22		131 2 6
Par Consols	117	611	17 0	North Frances	14		58 9 0
Rosewarne United	96	624	7 6	Boiling Well	10		13 0 0
Copper Hill	90	356	2 0	Boswidden	9		115 5 0
Great South Tolgus	85	571	10 6	Camborne Consols	5		7 10 0
Average Standard		£119	7 0	Average Produce			6⅞
Average Price per ton		£5	10 6				
Quantity of Ore	2403 tons	Quantity of Fine Copper, 166 tons 9 cwts.					
Amount of Money		£13,258 12 6					
LAST SALE.—Average Standard		£122 11 0.		—Average Produce			6⅛
Standard of corresponding sale last month, £124 6 0.		—Produce, 6⅞.					

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons	416	£3344 11 0
Freeman and Co.	118	467 19 3
Grenfell and Sons	345	1399 13 0
Sims, Willyams, and Co.	251½	1302 10 0
Williams, Foster, and Co.	403½	2439 5 3
Mason and Elkington	256	1372 4 0
Bankart and Sons	102	374 17 0
Copper Miners' Company	124	735 1 6
Charles Lambert	188	1037 6 0
Sweetland, Tuttle, and Co.	141	354 12 6
Penclawdd Copper Co.	58	430 13 0
Total	2403	£13,258 12 6

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and parcels.—Devon Great Consols 2022—East Caradon 475—Marke Valley 410—Okel Tor 264—Devon and Cornwall 264—Bedford United 198—Brookwood 160—Wheal Edward 146—Wheal Friendship 120—Yarner 100—Kelly Bray 87—New Cornish 87—Lady Bertha 75—South Bedford 60—North Wheal Robert 39—East Wh. Florence 38—Fursdon 34—Collacombe 32—Sortridge Consols 28—Hawkmoor 21—Great Tregune 7—Rabey's Ore 2—Total, 4659 tons.

Copper ores for sale on Thursday week, at Tabb's Hotel, Redruth.—Mines and parcels.—South Caradon 478—Clifford Amalgamated 432—Phœnix 410—Tywarnhaile 383—West Damsel 320—Craddock Moor 227—Fowey Consols 210—Hallenbeagle 208—Great Wheal Busy 181—Great North Downs 173—Glasgow Caradon 160—Boscawen 105—Falmouth and Sperries 34—North Grambler 33—Grambler and St. Aubyn 16—East Wheal Ellen 16.—Total, 3336 tons.

PARTICULARS OF COPPER ORES SOLD IN CORNWALL IN THE QUARTER ENDING SEPTEMBER 30, 1864.

Copper ores, 41,149 tons (21 cwts.)—Fine copper, 2564 tons 4 cwts.—Amount of money, 211,885*l.* 13s. 6d.—Average produce, 6¼.—Average standard, 126*l.* 15s.—Average price (per 21 cwts.), 5*l.* 3s.

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. Watson and Cuell having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. Watson and Cuell transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. Watson and Cuell also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. Watson and Cuell are almost daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. Watson and Cuell having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

Remarks.—The delay in cutting the ore in the 75, in East Grenville, seems to confirm what we have repeatedly written in our Circular, that the ore is dipping west into Wheal Grenville, and is of the utmost importance to the latter mine. The 65 must be getting near the boundary, and every fathom driven enhances the value of Wheal Grenville; as near the eastern boundary a new and valuable mine may before long be worked very cheap, and in a fine channel of ground.—Crebor is turning out a first-rate mine: let anyone read this week's report, and buy at present prices.—Wheal Hope is gradually improving in the bottom level, which is very important; the cost has been reduced to 300*l.* per month, and they hope in a few days to have a fair sale of lead.—At Wheal Unity the lode continues good in the winze; now down 6½ fms., and about 100*l.* worth of ore raised from it. The shaft below the 60 has also a good lode in it. —Wheal Albert: The eastern part of this sett is looking well; the lode in the 25 east is worth from 15*l.* to 20*l.* per fm., and in a good channel of ground. The engine-shaft will hole the lode in the 45 in seven or eight weeks; and before that time Mudge's lode will also be cut in the 35 cross-cut. The mine lately sold a parcel of blende at nearly 6*l.* per ton.—At East Russell the expected discovery may be heard of any day, and no doubt there will be, if the lode should prove rich, great excitement and business in shares.—At South Darren, which we noticed last week, an important discovery has been made, adding, we are told, materially to its value. The 20 fm. level west having passed through a considerable length of moderate ore ground, became disordered and poor. A cross-cut was then driven north, and, after 15 feet, a good course of ore has been met with, similar to that in the levels below. It is now proved that the ore holds up not only to the 20, but, probably, to near the surface. The 40 is worth 40*l.* per fm., and the 30 is worth upwards of 30*l.* per fm.

Great Retallack.—It will be remembered that very large returns of blende, as much as 500 tons in a month, were formerly made from this mine; but the price varied from 40s. to 50s. per ton, and eventually dropped to 30s., so that raising it was stopped, and an adit commenced in a new piece of ground, where two fine lead lodes were discovered. The price of blende has now risen and 5*l.* to 6*l.* per ton, and it is calculated 100 tons per month can be raised, so as to leave a good profit that will go towards developing the lead lodes, which, so far as seen, show indications as good as any in the Chiverton district. Proceedings have been taken in the Stannaries Court against all defaulters, whose shares will be sold by order of the Court, and new blood infused into the concern, so that the mine, which is second to no speculation in the district, may be more vigorously and prosperously worked.

Electric Light in Factories.—Confident anticipations are now entertained that the brilliant, but hitherto extremely fickle, electric light will become practically applicable to the economic illumination of factories, the invention by which this very desirable result is to be brought about being due to Prof. Seely, of New York. He proposes to employ the current generated by an ordinary frictional electric machine, and obtains the light by interrupting the current. It has long been known that a very brilliant and steady light might be procured in this way, but the objection to its use is the uncertainty in the action of the frictional machine. When a machine is excited in a dry atmosphere the results obtained may be relied on, but moisture is a most dangerous enemy to success. Prof. Seely proposes to secure the continuous action of the machine in all weathers by surrounding the machine with a glass case, and keeping the air within the case dry by means of chloride of calcium or other hygroscopic substance. It has been observed that, when the conductor of an electric current is interrupted in a way to draw a spark across the break, the brilliancy of the spark varies with the material by which the conductor is terminated at the break. Professor Seely is now engaged in experiments to ascertain what material will produce the most intense light, and if the apparatus works, according to anticipation, a factory in which machinery is employed, may be lighted without any additional expense, except the small power required to turn the electrical machines. As in mills driven by water there is always a surplus of power during the winter months, the only time when lights are required, there would be no expense for this light except the first cost of the apparatus, which would be quite moderate.

Production and Application of Petroleum.—At a recent meeting of the Polytechnic Association of the American Institute, Dr. Rowell exhibited a glass model, illustrating the apparatus recently introduced in the oil region for raising petroleum. By the present mode, after a hole some 4 or 5 in. in diameter is bored through the earth down to the oil, a pipe is introduced with a pump near the bottom, and the oil is thus pumped out. In some cases the pressure of gas upon the surface of the liquid forces the oil nearly up to the surface, and it is in these cases that the new apparatus is employed. A second pipe is introduced into the hole, with its lower end bent upwards, so as to enter the lower end of the first pipe. Air is then forced by an air-pump down through the second pipe into the lower end of the first pipe, and as the bubbles rise along this pipe they so reduce the weight of the liquid column that the pressure of the gas raises it to the surface, and thus a constant flow is secured. Dr. Rowell's apparatus consisted of two glass tubes immersed part of their length in water, with the lower end of one tube bent up and entering the lower end of the other. On blowing into the bent tube, the weight of the aqueous column in the other tube was so reduced by the bubbles of air that the pressure of the water outside of the tube forced the water within the tube to the top, and it overflowed. The President remarked that this plan would require a larger expenditure of power than the pump, as the friction of an air-pump is very great. Dr. Rowell suggested as a counterbalancing consideration that with the pump motion must be imparted at every stroke, not only to the long line of pump-rods, but also to the whole liquid column, while with this air-pump arrangement the flow of oil would be constant. There would, therefore, be less expenditure of power in overcoming inertia. Mr. Page stated that the leather of which his boots were made was curried with petroleum in place of the fish oil usually employed, and that, though a year old, it had shown no signs of cracking. He observed that many leather dealers thought petroleum made the leather tougher than fish oil. In reply to a question, he continued that the average cost of refining petroleum is about 5 cents per gallon, besides the loss or shrinkage, and that this ranges from 10 to 40 per cent. With respect to petroleum candles, he remarked that he had compared the candles made of Marietta paraffin with the best sperm candles, and their superiority was very marked. They are just about as hard as lead, and remain perfectly solid and dry in the hottest climates.

Petroleum.—Dr. Georges has observed that the emanations of petroleum have a weakening effect on the muscular system, and cause headache, especially in the case of nervous people and those who live in a confined atmosphere exposed to these emanations. He states that the latter contain a peculiar principle which may be eliminated, and is found to act principally on the brain and heart. Ether of petroleum may, he adds, be used to cool the teguments during surgical operations, because it causes no pain on the bleeding parts.—*New York paper.*

Notices to Correspondents.

Babbitt's White Metal.—Could any of your correspondents oblige us with the address of Mr. Babbitt or Mr. Fenton, makers of patent white metal?—W. and Co.: *Liverpool.*

Schwartzkopff's Self-Acting Spanner.—"C. S. and Co." (Lincoln).—We are not aware that any progress has been made in introducing this spanner, though Mr. Schwartzkopff's agent was in this country for that purpose. Some negociations were, as we understand, commenced, but, owing to the unreasonable expectations entertained by the inventor, they fell through; it is even stated that as much as 30,000*l.* was asked for the invention. Of the ingenuity of the invention there can be no doubt, but the utility does not seem by workmen to be considered so certain. It is, for instance, complained by one that "as the whole head of the spanner swings loose, like the head of a flail, you cannot use it with one hand, so must let go your work to attend to the spanner." As to the head being inconveniently loose, it is certainly true; the question is whether the improvements compensate for the increased inconvenience.

Great South Chiverton.—It is much to be regretted that persons, especially those interested in the prosperity of an undertaking, should permit private pique to precipitate them into acts which may damage not only the interests of those they are displeased with, but those of many besides who have done nothing to excite their spleen. "A Shareholder," in last week's Journal, complains of some person to whom the shareholders have entrusted the management of their affair having "swerved from a certain compact, and thereby created an unpleasant dissention." I know of no "dissention," nor of any swerving from a compact on the part of any one of the managers; but if it were otherwise, there is something very reprehensible in "A Shareholder" availing himself of your columns to express his angry feeling upon a matter which he says "cannot in any way affect the property itself." It is a sorry bird that fouls its own nest, and he cannot be a discreet shareholder who permits a private matter, probably a misconception, to induce him to indite and publish a stupid libel on some one he has not the manliness to name.—Henry Chapman, Secretary.

Share Dealing.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

We are compelled to postpone several letters, &c., until next week, among them, Limited Liability—Slate and Slate Quarrying Machinery—Copper Mines and Smelters—Manufacture of Zinc White, &c.

*** The Mining Journal is published in time for dispatch by the early mails on Saturday, and should be delivered with the usual morning papers of that day. In cases of irregularity, we recommend that orders be given to Messrs. Smith, or other active agents, who will readily undertake to supply it.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, OCTOBER 15, 1864.

THE NEW HYDRO-CARBON LIGHT.

The enormous extent to which the illuminating power of ordinary coal-gas is increased by naphthalisation is already well known, and for some time past the efforts of inventors have been directed to the production of a simple and effective apparatus, in which to impregnate the gas with the naphtha vapours. The results obtained have, no doubt, been highly satisfactory, but, owing to the nature of the substance employed, the introduction of the system of carburetting gas has been anything but general. It should be observed that the practice has been to use either benzole, naphtha, or some other equally volatile hydro-carbon, the supposition having been that these alone were applicable to the purpose. Now, the objection to all volatile hydro-carbons is, that as the more volatile portion gradually separates itself from the less volatile portion the liquid becomes impoverished, and the amount of carburation of the gas sensibly diminishes. To remedy this evil several suggestions have been made, the object in every case being to submit to the action of the gas only the quantity of fluid which such gas is capable of "carrying" to the burner, and to cause the gas to take up the more and the less volatile portions together, that the carburation may be regular. Perhaps the nearest approach to regularity has been obtained by the use of a series of cotton wicks, so enclosed in a case that the gas must pass through them on its way to the burner, such wicks saturating themselves by capillary attraction from a layer of fluid at the bottom of the vessel, kept at a uniform level by a bird fountain, or its equivalent. When first applied, and also when the fluid is particularly pure and volatile, the action of such apparatus is all that can be desired, but there is a tendency in practice for the impurities to foul the wicks, and render the working very unsatisfactory.

With a view to secure the advantages of carburation without its inconveniences, the Rev. W. R. Bowditch, of Wakefield, has contrived a carburator, in which a substance that at ordinary atmospheric temperatures is not volatile is used, the volatilisation and consequent carburation of the gas being effected by the heating of the hydro-carbon with the flame from the burner in which the carburetted gas is burned. At the Queen's Hotel, St. Martin's-le-Grand, on Wednesday evening, Mr. Bowditch explained the construction of his apparatus, and provided the necessary photometrical arrangements in the way of test meters, photometer, &c., to enable those present to compare the illuminating power of the naphthalised and ordinary gas. Mr. Bowditch remarked that artificial light is obtained from white-hot carbon within a flame, the amount of light depending upon the quantity of carbon present, and upon the temperature to which the carbon is raised. Common gas is very rich in heating materials, but poor in the highly carburetted bodies which afford light—hence while its heat is great its light is feeble. Nearly 90 in every 100 feet of common gas consists of heating constituents which do not afford light—hydrogen, marsh gas, and carbonic oxide. If before this poor gas is burnt a quantity of a body rich in carbon, such as napthalin or carbolene, be added to the gas the light is enormously increased, the increase varying in proportion to the quantity of carbon so added, provided it be not in such excess as to cause smoke. Mr. Bowditch's patent apparatus consists of a gas-tight metallic box, into which are soldered two gas pipes, one for conveying gas into the box, and the other for conveying gas and vapour out of the box to the burner. The burner is fixed to the outlet pipe, and so placed that when gas is being burnt the hot air from the gas flame must impinge upon the box, This box is provided with a screw-plug, through which the hydro-carbon is put into it, and this plug is closed during use. The box being supplied with hydro-carbon, is connected with any ordinary gas-fitting, and the gas is lighted. At first the gas passes over the surface of the hydro-carbon without being affected, but when the temperature has risen sufficiently to convert the hydro-carbon into vapour the passing gas carries with it a quantity of vapour, and the flame becomes highly illuminating, the illumination being proportional to the quantity of vapour present in the flame. Owing to the extreme richness in carbon of naphthalin (the proportion of carbon to hydrogen being as 120 to 8) the quantity which can be burnt perfectly is small. Not more than 35 grains can be burnt with each foot of ordinary gas, and to consume this quantity it is necessary to use fine burners, such as No. 2 Cannel. The apparatus, too, must be so constructed that not more than the proper quantity of naphthalin be volatilised, and this is secured by placing the flame 7 or 8 inches below the box, and burning from 1½ to 2 feet of gas through a Cannel burner. If larger flames be desired, a shield must be placed between the box and the light, so as to ward off part of the heat, or the distance between the light and the box must be increased.

In a careful experiment which Mr. Bowditch made at Wakefield, he employed naphthalin as the carburetting material, and consumed the gas at the rate of 3 cubic feet per hour. The naphthalin consumed was 31·5 grains per hour, as ascertained by an accurate balance; and the light given by the two flames was equal to 22·5 sperm candles, measured by a Bunsen's photometer. The gas employed in this experiment, consumed in a flat-flamed burner, would not give more than the light of 1·5 candles per foot, whereas by adding to it 31·5 grains of naphthalin, the illuminating power was raised to 7·5 candles per foot; or, to express the result in another manner, an addition to gas of a seventh of its weight of naphthalin increased the illuminating power fivefold. In the experiments on Wednesday the results were still more favourable to the carburetted gas, owing to the extreme poverty of London gas. Burning the London gas at 3½ feet per hour, and the carburetted at 3 feet per hour, the light given by the latter was seven times that given by the former, yet it appears that the cost of effecting the carburation is less than 9d. per 1000 feet carburetted. The carburetting material used is designated carbolene, which is one of the heavy hydro-carbons obtainable by the ordinary method of distilling coal oils, purified by a process discovered by Mr. Bowditch, and for the present, at least, kept secret. The carbolene will be sold to the consumer, most carefully purified, at 1s. 6d. per gallon, which is a highly important point in its favour, since the cost of all the volatile hydro-carbons which have been applied to the same purpose has been at least double that amount. Mr. Bowditch states that the process is as safe as gas, because the substances employed to enrich the gas cannot be fired even when they are heated to 212° Fahr., nor is the vapour combustible, except when mixed with gas.

Regarding the invention as a whole, there is much to admire in it, and as Mr. Bowditch appears to have correctly ascertained the position which it is necessary to give the burners in order to ensure the volatilisation of the carbolene in proportion to the gas consumed, we cannot see that more care than is necessary with ordinary illuminating gas would be required to avoid accident with the naphthalised gas. Owing to the construction of the apparatus, it is almost impossible for over-vapourisation to happen, there being, under ordinary circumstances, no pressure exerted by the hydro-carbon vapours in the vessel, the force which carries the carburetted gas to the burner being entirely due to the pressure of the ordinary gas. The effect of over-vapourisation is to produce smoke, and this can be at once reduced by reducing the consumption of gas. Even assuming that the volatilisation were so rapid that the whole of the vapour given off could not escape through the burner, it is probable that no great inconvenience would result, inasmuch as there would be but little difficulty in constructing the carburators of such strength that they could withstand a pressure greater than that at which the gas is supplied by the company. The consequence of over pressure would then be that the carburetted gas would be forced back with the ordinary gas into the pipes, where the greatest evil likely to result would be the choking of the pipes by the solidifying of the naphthalin, the effect of which would be to cut off the supply of gas, and extinguish the light, when all further danger would, of course, cease. We do not at all see that such an accident as over-vapourisation would be at all likely to happen, but mention the probable occurrences that would follow, in order to show that no fears need be entertained by those adopting the invention.

IMPROVEMENTS IN TRACTION-ENGINES.

The desirability of providing a more economic system of propulsion on common roads than that supplied by horse power has led to much attention being given from time to time to the perfecting of the traction-engine, which, as a compact substitute for enormous teams of horses, is one of the most useful contrivances that could be desired. The small amount of space occupied by a traction-engine as compared with cattle cannot fail to give it an advantage, in many instances, which can scarcely be estimated, such, for example, as the moving of a great weight round a sharp curve, where, no matter what the power of a team, it would be comparatively useless, owing to the almost impossibility of applying the whole of the power at once. With the traction-engine, on the contrary, the whole of the power being contained within the space of a few feet is always available in the most advantageous form; and hence it is that with the traction-engine such stupendous work has been performed.

Although the number of inventions patented for various forms of traction-engines is very large, they are all based upon the same principle—that of providing the largest possible surface for applying the tractive power upon. The object in view has been sought to be achieved in about four distinct ways, each of which has some peculiar advantage. In Boydell's, one of the first traction-engines introduced, the snow-shoe of Canada and other northern countries was taken as the model upon which to form the endless railway, the continuity of the shoes being ensured by providing a series of them around the periphery of the wheel. Of the efficiency of this arrangement there can be no doubt, but the objection is that the shoes are extremely clumsy in appearance, and much in the way. The system of having wheels with broad tyres, acting directly on the ground, is, without doubt, the neatest system; but, owing to the facility with which such wheels sink in the ground, the system has not proved successful. The modification of this, and perhaps the best arrangement of which the traction-engine is capable, is the use of drums, within which the driving wheels work, the drums being kept in position by the use of guides affixed to the sides of the engine. The fourth system is that of affixing the rails to boards, which are hinged together and guided by running over polygonal wheels or their equivalents. The system, although it has some objections, is, no doubt, capable of such improvement as shall render it of practical utility. It is upon this system that the invention of Mr. W. Chapman, of Clonmel, is based. The invention, he observes, relates to vehicles for common roads, whether propelled by steam, such as traction-engines, or drawn by animal or other power, and is intended to facilitate the draught of such vehicles. The improvements consist in the employment of an endless suspension railway, composed of an endless series of rails, hinged or jointed together, carried by a pair of circular or polygonal-shaped carrying wheels, revolving clear of, or out of contact with, the ground, upon independent axles of their own, carried by the framing of the vehicle. The driving or supporting wheels of the vehicle are situate between, and in a line with, the wheels that carry the endless railway, so that they can run upon the rails laid down for them by the carrier wheels. The wheels, which are of steel or wrought-iron, the inventor prefers to make of a bridge section, the broad flanges resting upon the ground, while the supporting or driving wheels of the vehicle bear upon the raised portions of the rails; they are jointed together end to end, so as to form a continuous series, and may have filling pieces of wood fitted on to them to prevent noise, and cause them to fit accurately on to the circumference of the carrier wheels, whether such wheels be circular or polygonal. It is to be hoped that ere long the success which Mr. Chapman has met with will be announced.

Manufacture of Articles from Cast-Iron.—Mr. Neil McHaffie, of Glasgow, claims the making of castings of white hematite, or the mixture of this with mottled or grey, and very gradually cooling the said castings in an oven or furnace, the moulds being placed therein and heated before the metal is poured in, or the castings being produced, out of the furnace, and afterwards placed therein. The invention is applicable more especially to the manufacture from cast-iron of articles which are required to combine great toughness with considerable or great hardness, as, for example, projectiles (suitable for the penetration of armour plates), plates, and slabs for batteries, dies of large size for stamping metal, and many other articles. He takes cast-iron of a very hard nature, by preference white hematite pig, or a mixture of this with mottled or grey hematite pig, which if cast in the ordinary manner would be too hard to be conveniently cut and worked. For many classes of castings it is found that all white pig may be used, while in other cases more or less of the mottled or grey pig may be mixed therewith, and still produce castings of the requisite hardness. He has found a mixture of two parts of white and one part of mottled hematite pig to be a good working mixture. This metal he casts in a mould of fire-clay or other material, which is kept heated in a furnace to a red heat or hotter. A mould of sand, mixed with a little lime, he finds suitable for many purposes. The metal is run into the mould, and is gradually cooled down in the furnace, the cooling being made to occupy from 30 hours to 72 hours, or longer, for very large sizes. The gradual cooling of the metal ensures uniformity of structure throughout the mass. Afterwards, although the metal is still hard, it can be turned and shaped, if necessary. If greater hardness be required, the article (after turning and shaping, if these processes are resorted to) may be hardened by reheating and plunging, as is practised when hardening steel. The hardness, also, may, if required, be afterwards adjusted by a process of tempering, as is practised with steel. The furnaces or ovens may be made of any convenient forms, and the heat, by preference, used for the harder mixtures—that is, with most white pig in the mixture—is from a full red to nearly a white heat, or even higher, and for the softer mixtures from a full red heat down to a red heat. Castings from similar mixtures may be made in the usual way, either in dry sand, green sand, or loam moulds, but instead of letting them cool in the usual way they are taken out of the mould as soon after solidifying as possible, and placed in the furnaces or ovens, heated as before mentioned, and then left gradually to cool, as in the former case. This process does not usually produce such good results as pouring the metal whilst the moulds are in the furnace or oven, but is sometimes more convenient.

Improved Atmospheric Forge Hammer.—A great improvement has been made of late years in forging light work. Instead of relying upon the hand and eye of some skilful workman, dies have been substituted, and the jobs thus produced have all the accuracy of castings, while they are far superior in strength. Many pieces in gun work which were formerly made of malleable iron, from the supposed impossibility of forging them, are now drawn out from the solid bar at less cost than they could be cast. Drop presses have been used on this work, as also rapid-working trip-hammers, but these make such a tremendous racket that it is almost impossible to stay in their vicinity. In the hammer invented by Mr. Bennett Hotchkiss, of New Haven, Conn., the force of the blow is derived from compressed air. The air is compressed by a cylinder and piston. The cylinder moves in the slides by the action of a connecting-rod, driven from a face-plate by belting in the usual manner. There are two small holes in the cylinder, through which the air enters. The whole machinery is carried in a strong iron frame. Upon the cylinder ascending the air will enter through the holes, and be compressed as the cylinder goes up. This compression is at the bottom of the cylinder, and, therefore, lifts the hammer moving in the slides. By the time the hammer is lifted the connecting-rod arrives at the top centre, and commences to descend. The air then enters above the piston, and as the cylinder still comes down condenses the volume very highly. This condensed air is the force stored up to make the blow, for so soon as the connecting-rod turns the bottom centre the confined air expands instantly, and thus throws the piston and hammer down with great force. This action is repeated at every revolution, and the height of the cylinder is altered so as to forge large or small work by lengthening or shortening the connecting-rod. The hammer is lifted at the ascending stroke by the compressed air below, as we stated previously, and this also aids the cylinder in compressing the air for the return blow; and it is owing to the rapid action of the two movements that the piston does not fall before it obtains the advantage of the air compressed above it. The hammer is exceedingly simple in its construction; there are as few as about it to get out of order, and the packing is exceedingly durable and easy-working. Both that in the piston and in the cylinder-head is made of the cup-leathers used in packing hydraulic rams, and they have run for months without leakage or perceptible

wer. The dies are fastened in with keys, and the anvil block is adjusted by another key, so that the dies can be set properly without delay. The speed of the hammer is regulated by an idler-pulley, which can be operated by a treadle.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Oct. 13.—The Quarterly Meetings of Ironmasters have been held, today at Birmingham, and yesterday at Wolverhampton. There has been a fair average attendance, and the result of the meetings is that there is a moderate demand for manufactured iron, quite equal to the supply under the present reduced production owing to the miners' strikes, but which would, probably, fall short if the district were in full work. The American demand continues small, and the foreign orders generally are below the average, whilst the home demand is good. Few sales of pig-iron are reported, and the trade is very dull, at low prices, despite the great reduction in the make. On the whole, the trade is quiet, but not depressed.

During the assemblage of the members of the trade at Wolverhampton, yesterday, the melancholy tidings of the death of Mr. Philip Williams, the Chairman of the Ironmasters' Association, reached the town. Mr. Williams was in his 67th year, and died from an illness which seized him five weeks ago. He was widely known and respected. He was at the head of the firm of Messrs. Philip Williams and Sons of Wednesbury Oak, Tipton, ironmasters, was the senior partner in the banking firm of Philip and Henry Williams, of Wednesbury, and was a trustee of the Dudley and West Bromwich Banking Company. He was a director of the London and North-Western Railway Company, Deputy-Chairman of the Birmingham Canal Company, in which he for many years took great interest; a director of the South Staffordshire Railway Company, Chairman of the Midland Steam-Boiler Assurance Company, and, as previously stated, was Chairman of the Ironmasters' Association, in which office he succeeded Mr. Grazebrook, 15 years ago. In 1857 Mr. Williams was nominated High Sheriff, and was escorted by an immense procession; and he was magistrate and a deputy-lieutenant of Staffordshire. Mr. Williams was one of several sons of a gentleman who rose from a comparatively humble position. He was regarded as one of the wealthiest men in the county. He was remarkably shrewd, and, though he by no means sought public occasions, he displayed great tact in addressing an audience; and his address on one occasion, some years ago, when a deputation of colliers waited on some of the masters in reference to a reduction of wages, was greatly admired by Sir George Grey, then, as now, Home Secretary, and by Lord Hatherton, the late Lord-Lieutenant of this county, as a manly, and, at the same time, most skilful appeal to the common sense and good feelings of the men. Mr. Williams was never married. The question as to who is to be his successor as Chairman of the Ironmasters' Association is naturally being discussed with considerable interest. Three gentlemen are spoken of as probable. Mr. John Hartley, the senior partner of the firm of G. B. Thorneycroft and Co., Mr. W. Mathews, of Corbyn's Hall, and Mr. W. O. Foster, M.P. Mr. Mathews, who is a very able man, may be objected to as being only a producer of pig-iron; and, on the whole, it seems probable that Mr. Hartley will succeed to the position, but this is mere speculation.

The strike must be getting a stale question to readers at a distance, and the prominent features presented this week shall be dismissed as briefly as possible. Lord Leigh's interposition, whilst acknowledged as undoubtedly well meant, is generally regarded as ill-timed. In suggesting to the masters that they should give the wages demanded after the men had worked at the reduced rates for a fortnight, he really imputed to them that they were contending for the mere name of victory, and were causing terrible loss and distress to themselves and to thousands for the empty appearance of making the men give way, and being willing to give up all but the shadow even of so contemptible a desire as that. Had this been so, no words could have been too strong to denounce the employers' conduct, but Lord Leigh, after hearing them, appears to have changed his views, and to have blamed the leaders of the strike for inducing the men to remain out. The two important facts this week are, that the supply of coal is being greatly increased, and that a considerable number of the men, both in the Bilston and Dudley districts, have returned to work. Very large meetings have, however, been held, and Griffiths, the leader of the strike, has told the men, as if it were good news, that some of the masters are nearly ruined, that he was going to get a fresh supply of whistles and drums from Birmingham for the purpose of making demonstrations against those who have gone in, and that he is in hopes the drivers of the locomotives will refuse to convey coals into South Staffordshire. At Lower Gorval the roofs and windows of a miner's house, who had gone to work, have been blown away by the explosion of a diabolical machine, flung into the room where he and his wife slept, most extraordinary to state, without injuring them; but another similar attempt has failed. A man is in custody on suspicion. The men on strike repudiate such deeds as these, but they are recognising the demonstrations against men who are at work. The impression is general that the strike will soon cease, and that the men who have played for fifteen weeks, losing about 30s. per week, will return to work.

Recently a change has taken place in the management of the extensive ironworks carried on at Tipton, in Staffordshire, by the successors of the late eminent firm of Barrows and Hall. The change has been caused by the retirement of Mr. Josh. Hall (son of the late Mr. Hall, who was the founder of the firm) from the establishment altogether. This gentleman has had for some years the active management of the works, but for the future the sons of the late Mr. Barrows will carry on the business, under the style of William Barrows and Sons. It is, however, hoped that Mr. Hall will not allow his great ability in the manufacture of iron—ability gained by long experience and careful observation—to lie dormant, but that he will accept proposals of a liberal nature to remain in the district as an active promoter of the important trade to which he has devoted so much attention.

The following most important letter, as to the state and prospects of the South Staffordshire iron trade, has been published by Mr. S. H. Blackwell, in the *Birmingham Daily Post*. Mr. Blackwell points out the cheap rate at which iron can be produced in various districts, so that pig-iron of very good quality is largely sent here at 70s. per ton, long weight. He shows that, whilst 42 out of the 56 blast-furnaces in the Dudley district are out of blast, pig-iron is now as low as before the advance; and that whilst this is the case in Staffordshire, in new districts, longer extensions are taking place. On these grounds he urges the necessity of the men not expecting to maintain the extraordinary rate of wages they received when iron was raised to an unusual price, which could not be maintained:—

THE SOUTH STAFFORDSHIRE IRON TRADE.

Sir,—I am very unwilling, under existing circumstances, to take any prominent part in the present most unfortunate strike of the colliers here, but the spirit of the remarks made by the speakers at the Bilston meeting yesterday, as reported in your paper of today, is so opposed to the real interests of the men, that I feel confident the more thoughtful of the colliers will themselves recognise this, if the present position of the trade in South Staffordshire is once clearly understood by them. The character of the remarks I allude to will be seen from the following extract of your report of the speech of Mr. Thomas Griffiths, the Chairman of the meeting:—"He urged them to continue the strike; said that they had nearly ruined some of the masters already, and, if the men continued faithful to themselves, they must soon become altogether successful."

That the strike is inflicting great injury upon all the masters, and possibly ruin upon some, I am, unhappily, too well aware, but what I would ask the men to consider is, whether success, obtained by the ruin of the master, which their Chairman calls upon them to hope for, would not in the end recoil most bitterly on themselves? The ruin of the masters must lead either to the temporary or the permanent stoppage of the works. The men, with their Chairman, probably think it would be their temporary stoppage only. No doubt they consider that if present proprietors of works are ruined, the works would soon pass into other hands, and the consequences would thus fall upon the masters solely, and not upon the men. Setting aside, for a moment, the wrong spirit of this, I would ask both the men and the public seriously to consider the present position of South Staffordshire, as an iron-making district, in comparison with other similar districts. I do not know that I can better illustrate this than by the following extracts from a letter written by me to a member of the trade in April last:—

"Referring to my conversation with you yesterday evening, in reference to the position, as far as regards supplies and costs of minerals of other districts, in comparison with South Staffordshire, I beg to hand you the following facts:—

1.—The Seend Ironworks, Wiltshire, can supply themselves with green-sand ironstone at a cost of 2s. per ton on the pig-iron made. This includes cost of raising and delivery on furnace-bank, but does not include royalty.

2.—At the Westbury Ironworks, also in Wiltshire, the cost paid for getting and delivering to furnaces of the oolite ironstone which they use there is 8d. per ton. It may take a little more than 3 tons to make 1 ton of iron; but I believe with good weights of stone the yield by the books is as nearly as possible that quantity. This is also exclusive of royalty.

3.—In the Grosmont Valley, in the Esk, near Whitby, the beds of lias argillaceous ironstone there raised, known by the names of the Pecton and Avicula beds, are worked at a cost of 1s. 6d. to 1s. 10d. per ton: 3¼ tons of the large miners' weight which they get will make a ton of iron, although if equal weights be taken it will require about 3¼ tons.

4.—The French ironmasters are delivering girders into London at the present moment at 3*l.* per ton less than South Staffordshire quotations to the same market.

5.—Mr. ——, of ——, tells me that, having had to obtain estimates for rails and earthworks in France, for a line of railway he is interested in there, he has obtained his rails for 40s. per ton less from French makers than he could have done from English makers, and his earthwork at very reduced estimates to those given by English contractors.

6.—Belgian plates are being sent to the London market below the South Staffordshire quotations.

7.—Austrian ship-plates have been recently delivered on the Thames at lower prices than the South Staffordshire makers have been willing to contract for.

6.—Good mine iron, fully equal in quality to the ordinary brands of mine iron recently made in South Staffordshire, can now be procured in South Staffordshire, to any extent, from the following places—Wiltshire, Whitby, Middlesbro', &c., at 70s. per ton, long weight, delivered. Quality of some of these brands exceedingly good.

These are all points which, I think, show conclusively that if no decided stand is made in South Staffordshire against the present exorbitant rate of wages, the trade must go to other districts, and, if once taken elsewhere, it will never return."

The experience of the trade since this letter was written most strongly confirms the inference I then drew from the facts stated, and which facts could be very largely extended. After April prices of pig-iron declined still further, and pigs of quality equal to those named were largely sold here at from 60s. to 65s. per ton, long weight; the best hæmatite pigs sold at 70s. In fact, ordinary qualities of mine iron fell to prices only equal to, if not less, than those ruling before any one of the three advances were made to the men. As an instance, before any advances took place I sold pigs at 65s. per ton; after the three advances I obtained for a few weeks 85s. per ton. In June I had the greatest difficulty to realise 65s. per ton for pig of precisely the same quality.

Colliers' wages in the west of Dudley have hitherto been regulated principally by the price of pig-iron, and this must of necessity be always more or less so, as pig-iron is the great staple branch of the trade in this part of South Staffordshire. In consequence of the fall in the price of pigs at the close of July, out of 56 furnaces on this side Dudley only 14 were in blast, and the furnacemen, knowing this, readily accepted a reduction of 15 per cent. On the Wolverhampton side, not only had this reduction in furnacemen's wages been made, but one of the three advances to colliers had been also taken off. Under these circumstances, the ironmasters on the west side of Dudley had no alternative but to give notice to the colliers for a reduction to the extent of one of the three advances; and, considering this would have left the full advantage of two advances to the colliers, with no corresponding advantage to the pig-iron masters, no difficulty was anticipated. Unfortunately, the question has been limited by the colliers, and largely by the public, to one of prices of cost only. It cannot be so limited, and the ruling prices of iron, including especially those of pig-iron, must ultimately decide it, if the trade of the district is generally to be preserved.

Owing to the extraordinary facilities of making pig-iron elsewhere, and especially in the North of England, and the enormous consequent extension of blast-furnaces, there is little prospect of any decided improvement in the pig-iron market here. For some time it is probable the prices of finished iron here will rule higher, in proportion, than those of pig-iron; they are now 30s. higher than in the early part of last year. This arises from the fact that the erection of new blast-furnaces has for some years gone on greatly in excess of that of mills and forges, and it will continue so long as this disproportion exists. Here is the explanation why mill and forgemen's wages were not attempted to be reduced at the same time as those of blast furnacemen and colliers.

If the position of the district, in reference to prices generally, is considered, the action of the masters will be seen to have been not only reasonable but liberal. Pig-iron prices, except as regards a very few favoured brands, are not higher than before the first advances to the men. Furnacemen's wages have been reduced 15 per cent., leaving them with the advantage of 15 per cent. Finished iron prices have receded 20s., being 30s. higher than at the commencement of 1863. Mill and forgemen's wages have been allowed to remain at the full 30 per cent. advance, giving them an advantage of about 15 per cent.

Coal prices are regulated by the combined prices of pig-iron, finished iron, and the demand for general consumption; the coal and ironmasters (the two interests cannot be separated) ask for only one of the three advances to be taken off, declaring a corresponding reduction in the price of coal, thus leaving, as regards the coalmasters and the men, equal advantages to both. As regards the finished ironmasters the advantage would have been in favour of the men, and as regards the pig-ironmasters the two first advances would have been entirely in their favour.

The public, and I believe the Birmingham public especially, have looked at the question as one of the price of coal merely, without considering to what an extent the existence of the iron trade in the district is involved. The importance of this part of the question will, however, soon force itself upon both the public and the men, and unless the one is prepared to treat with indifference the partial and large suspension of pig-iron making in South Staffordshire, and the other are prepared to seek employment elsewhere, the utterly fatal consequences of the strike will soon be apparent.

At the present moment the following is the list of furnaces in and out of blast in the west of Dudley:—

	Furnaces.	Out.	In.
Oak Farm	2	2	0
Shut End	4	4	0
Corbyn's Hall (New)	2	2	0
" (Old)	4	2	2
Ketley's	3	3	0
The Leys	3	1	2
Russell's Hall	5	5	0
Brettle Lane	2	1	1
Old Level	2	2	0
New Level	3	1	2
New British	4	2	2
Netherton	2	1	1
Dixon's Green	1	1	0
Woodside	2	1	1
Windmill End	3	3	0
Bumble Hole	2	1	1
Dudley Wood	4	4	0
Withymoor	2	1	1
Old Hill	2	2	0
Parkhead	2	1	1
Total	56	42	14

The significance of the above table needs no comment. I am most reluctant to attempt to enforce it by any facts personal to myself; but the position of the district is so serious that I ought, perhaps, to add that at the present moment I have applications to furnish plans for the erection of blast-furnaces in three separate distinct districts. I am also asked to leave Dudley, and devote myself to manufacturing works in two separate districts; and, on calling at an engineering establishment in this neighbourhood yesterday, I found them so full of mill and forge orders for Russia and the North of England that they could undertake no new work for some months to come. If either the trade or the public blind themselves to these significant signs of what the future may probably have in store for this district, we shall be little prepared to meet the great changes which before long must come over it, if a permanent spirit of hostility between masters and men be once aroused. If, on the contrary, the masters and men will work together with a mutual desire to meet the great and constantly increasing competition of other districts, some, perhaps many, years may elapse before the advantage this district possesses in the superior quality of Staffordshire makes is wholly lost.

I would especially call the consideration of the men to the fact that at no period have they ever been so little justified in placing themselves in a position of antagonism to the masters, still less in looking hopefully, as their Chairman tells them to do, to their ruin. On every side endeavours are being made by the middle classes to raise the condition of the workman, and to assist in every wise effort in this direction made by themselves. Referring only to evidences of this furnished by the press during the last few days, I would ask the men to consider the sympathy shown at the York meetings in the success of the co-operative stores at Rochdale and elsewhere, and the assistance offered for the extension of this system in other manufacturing and in the agricultural districts; or to look at the reports in your paper of to-day of the educational movements in this district, as brought before the meeting at Dudley yesterday, presided over by Lord Lyttelton; or at the significant fact, also reported in yesterday's papers, that in a large joint-stock manufacturing establishment at Liverpool, 3000*l.* in shares have been placed to the credit of the workmen, who are to receive dividends on the same, in proportion to the amount of their individual wages, thus giving them a direct interest in the success of the works, and introducing another most important extension in the principle of general co-operation, in this case including both masters and men.

In the long run, the interests of the two classes cannot be separated without injury to both. Many masters now fully recognised the truth of this principle, and are endeavouring to act upon it, for the profit of the men, in every way. It depends entirely upon the conduct of the men themselves how soon it is universally admitted, and nothing can retard its recognition so much as strikes, carried out to the ruin of the masters, and involving, of necessity, as they always do, great distress and misery to the workmen.

Dudley, Oct. 11. S. H. Blackwell.

REPORT FROM NORTHUMBERLAND AND DURHAM.

Oct. 13.—The Coal and other trades continue brisk, and the price of coal still improving, the prospect for the Coal Trade during the ensuing winter is extremely satisfactory. The home, London, and general coasting trade is certainly very active, and the export trade is also good, the last return showing that the total exports from the north-eastern ports during September were 386,343 tons, against 295,011 tons in September, 1863, being an increase of 91,332 tons. The whole trade, therefore, may be said to be in a most healthy and prosperous condition.

We regret to state, however, that the strike at the Bedlington Colliery still continues, with little prospect of an early settlement. A large meeting of miners was held in that district, on Monday, and from the light thrown on the subject by the various speakers, it would appear that the prospect is very gloomy. The men make demands sometimes which are not reasonable, and rely on a powerful Union to enforce their demands, either forgetting the fact, or ignoring it, that "two can play at that game;" and the result of all this is, that the steam coalowners have now a powerful Union, and any demands made by the men are resisted most effectually. It is quite possible that now, when this Union is formed, the owners may be a little too severe with them, but the men really have themselves to blame for the present position of affairs, as they compelled the owners to make such an arrangement. The sooner the old state of things can be brought about again the better—when neither party had a Union, and, consequently, the fair market value of labour was obtained. It is quite in vain to talk of the masters and men agreeing to keep the prices up, and sharing the benefit; such an arrangement is not only absurd and unnatural, but manifestly unjust. Ultimately the rate of prices both of coal and wages must be regulated by demand and supply, and whatever convulsive efforts may be made by any party to upset this can only disturb the equilibrium for a certain time, and in a limited sphere. The markets of the world are open both to the manufacturer and the operative; and as the means of communication will constantly improve, it is in vain to entertain the idea that the laws which regulate markets can be in any way evaded; on the contrary, we contend that the more they are acknowledged and acted upon the better for all parties.

With respect to the Bedlington case, we have omitted to notice that the dispute is not confined to prices; it also involves a very weighty question as to the mode of working: the men wish to blast the coal, without cutting it up the side, which would cause a very serious loss of round coal. This is a very important matter, and would cause a serious loss to the owners. The men, of course, would benefit by it, as it would reduce their labour, but it would be a cause of very great loss in the produce of good coal.

Two important cases in connection with mining have lately been adjudicated upon here—one at the Durham County Court, and the other at the Gateshead County Police Court. The first is a rather complicated one. The plaintiff, who is a pitman at Cassop Colliery, summoned the defendant, the owner of the colliery, for the sum of 2*l.* 8*s.* for wages, alleged to be due on account of plaintiff having been laid off work in consequence of the dangerous state of the mine. Mr. Roberts, of Manchester, acted on behalf of the plaintiff, and Mr. Meysell on behalf of the defendant. The Judge gave his decision in the case in writing. He was of opinion that the man was justified in refusing to work in the Five-quarter Seam on account of the ventilation being deficient, that it had not been proved that he was offered work between July 18 and Aug. 2, that according to the 9th clause of the bond it appeared hewers were not entitled to wages or compensation in case they were laid off work by reason of any accident happening to any of the engines or machinery placed in or upon the pits, and that plaintiff was laid off work from July 18 to Aug. 2, in consequence of the deficient ventilation of the mine, and not by reason of the improper or unsafe state of any of the engines or machinery. It appeared to him that the 9th clause should not be construed strictly, for it was hardly fair and reasonable towards the hewers employed in the colliery. It enabled the owner of the colliery to lay the hewers off work until the engine or machinery to which any accident might happen shall have been repaired or replaced, or until the shaft shall be restored after any accident, without finding them any other work, or paying them any wages, though it might require six months before such engines or machinery could be repaired. Surely some limit should be imposed upon that power. If the works to which any accident may happen could not be repaired within a short time, to be specified in the bond or agreement, then the owner of the colliery should be bound to provide other work for the men, or to pay their wages; or the men should be released and discharged from their agreement, and be at liberty to seek work elsewhere. The sum plaintiff received between July 22 and Aug. 5 was not proved, and, therefore, could not be taken into account. To divide 4*l.* 2*s.* 7*d.* by three, as stated in the claim, would give an average of 1*l.* 2*s.* 6*d.* for each fortnight, and it would require 7*s.* 6*d.* to make up 30*s.* for each fortnight. He would, therefore, give judgment for the plaintiff for 7*s.* 6*d.*, and allow all the witnesses examined by the plaintiff.—At the Gateshead County Court, Robert Brown was charged with having unlawfully absented himself from his service at the Usworth Colliery, he being bound for one year certain, from April 5, 1863, to April 5, 1864, and without lawful excuse. Mr. Daglish appeared for the owners. The fact of desertion having been proved, the defendant set up as an excuse the plea that he could not work owing to bad ventilation. A letter was read from Mr. Dunn, the Government Inspector, stating that he could not attend, owing to another engagement, but that he considered the ventilation sufficient. Mr. Jos. Smith and Mr. Croudace, also viewers, were examined, and proved that the colliery was efficiently ventilated. Mr. Coxon, the viewer of the colliery, also stated that the ventilation was good, and produced records to attest this. The defendant then stated that he had heard the evidence, and acknowledged he was wrong, and promised to return to work, and on his undertaking to pay the costs this course was agreed to.

At the meeting of the North of England Institute of Mining Engineers the discussion of Mr. J. L. Bell's paper on the "Iron Manufacture of the North and Cleveland District" was again postponed, in consequence of the absence of that gentleman. The discussion of the paper of Mr. Sopwith, on the "Lead Mining Districts of the North of England" proved most interesting and instructive. First, Mr. Sopwith proposed certain corrections to be made in the mode of delineating the various formations on a geological map, his object being to make the colourings on these maps denote more correctly the real nature of the measure underneath. Mr. Sopwith then referred to the Blackett level of the Allenheads Mines, a description of which is given in his paper. This is a most extensive work, and by being driven through the hardest limestone is, of course, a very expensive undertaking; its total length when completed, is expected to be about seven miles. The miners are at work at several different points, hydraulic engines being used at some of the shafts for raising the debris. The rock has been blasted in the usual way by means holes bored by manual labour. But lately a very ingenious machine has been invented by Mr. Westmacott, a partner of Sir Wm. Armstrong, for the purpose of drilling these holes, instead of doing it by manual labour; this machine is worked by hydraulic power, and the inventor has taken for his model the operations of a man in drilling, the various movements being exactly copied; first, the drill is pressed against the stone to be operated upon, and then a blow is struck, the drill is then withdrawn a little, and also moved a little round, again pressed against the stone, and struck, and so the operation is continued. All these operations are performed by the machine, which appears to be a very ingenious one. It is capable of striking from 150 to 200 blows per minute, and the drill makes one revolution during the striking of fourteen blows, its rate of progress being the size of the hole (being 1¼ inch) 2 inches per minute, or 20 inches in ten minutes, which has been done in repeated trials. So that, taking this rate of progress, it is capable of performing work equal to the labour of 12½ men, presuming that a man will drill in this stone 8 feet per day, which is a fair average; and the machine to bore 100 feet per day of ten hours. There can be no doubt that this machine will prove of great value.

A paper was also read by Mr. Hedley, of Derby, on the "Iron Mines and Modes of Making Iron in Nova Scotia." Several excellent plans and maps were shown in connection with this paper, which will be discussed at a future meeting. The subject of holding a general meeting in some distant locality was again discussed, but nothing definitely settled, the subject being again referred to the consideration of the council.

REPORT FROM MONMOUTH AND SOUTH WALES.

Oct. 13.—The Iron Trade retains its vitality, and South Wales makers are doing a large business. The decrease in the shipments, as shown by the returns for the month of September, might lead one to think that the trade had received a serious check, but such is not in reality the case. The exports from the local ports have long since ceased to be a correct criterion as to the state of the trade; for the railway facilities to Birkenhead, Liverpool, and London are now so complete, that a large quantity of iron is sent there, for either delivery to buyers or for shipment. Since last week the home demand has slightly improved, and there is a fair enquiry on continental account. Tin-plates remain without any alteration. The steam-coal collieries continue to be fully employed, and an enormous quantity of coal, comparatively speaking, is still being sent to Staffordshire. Higher prices are obtained for some qualities, and should the strike in the "black country" last for any length of time, it is pretty evident that a further advance may be safely looked for. House qualities are in demand, and coke commands a readier sale. The patent fuel works are well employed. The Pontnewynydd works are at a stand still, but it is believed they will go on again shortly. Preparations are being made to light another furnace at Golynos, making the third there in blast; and it is very probable that a second furnace will be lighted at Varteg. Important extensions and improvements are contemplated at Aberaman by the new company, and should they be carried out as proposed, Aberaman will become one of the finest iron and coal properties in South Wales.

The Aberdare branch of the Great Western has been at last completed, and both mineral and passenger traffic are now carried over it. By this line Swansea is placed in direct communication by narrow-gauge with Pontypool-road, Hereford, Worcester, Birmingham, and the Midland district generally, and, as compared with the old route, *via* Newport and Cardiff, there is a saving in distance of 20 miles, besides the important advantage of avoiding a break of gauge. Before the opening of this route the break of gauge was the great difficulty to be contended with, and, in consequence, the mineral traffic from South Wales to the Midland counties was materially checked. This difficulty being at last overcome, it is believed that a large through traffic in coal and other minerals will ultimately go over the new line. Messrs. Nixon, Taylor, and Co. are already sending a considerable quantity of coal from their pit at Mountain Ash to Birkenhead by the Great Western new route, and other colliery proprietors are likely to follow the example. The letters which have appeared in the Journal in reference to the Carmarthenshire mines have attracted a great deal of attention in the district, and it is evident that the mining resources of the county have been rather neglected up to the present time. The discussion will, without doubt, induce a searching enquiry to be made as to how far the metalliferous range extends into Carmarthenshire.

Trade of the South Wales Ports.—The returns for the month of September have been published, and show that there was a considerable falling off in the shipment of coal at nearly all the ports. The exports for the month and corresponding month of last year were as follows:—

	Sept., 1864.	Sept., 1863.
Cardiff	Tons 124,799	Tons 316,370
Newport	24,708	30,149
Swansea	47,528	37,727
Llanelly	11,168	7,353

Coastwise, the shipments were as follows:—

	Sept., 1864.	Sept., 1863.
Cardiff	Tons 59,695	Tons 68,487
Newport	44,079	48,292
Swansea	17,673	16,863
Llanelly	16,722	17,465

The above figures show that by far the largest proportionate falling off was at Cardiff, the cause being the scarcity of tonnage and the brisk demand on Staffordshire account. More Aberdare steam is being sent down to Newport for shipment, and this accounts for the increase in the exports. As was the case at Cardiff, the coasting trade suffered during the month from the want of vessels. Swansea is making gradual progress in both the export and coasting trades, and the Llanelly returns are also encouraging. Cardiff exported 9837 tons iron, against 12,370 tons in the previous month, and Newport 4420, as compared with 11,383 tons in August. The almost total cessation of shipments to America has brought about this large decrease.

The Tin-Plate Trade.—The quarterly meeting has been held at the Queen's Hotel, Cheltenham (Mr. Woodruffe, of the Machen Works, in the chair), and there were about 20 makers either present or represented. From the discussion which took place as to the present position and prospects of the trade, it

appeared that no material alteration had taken place since the last meeting, with the exception that there was a still further decrease in the American demand. The orders from the Continent were stated to be moderately good, and there was a fair enquiry on home account. Owing to the long-continued drought there has been a considerable decrease in the make, and in consequence the stocks of finished plates and block plates in makers' hands were not large. The prices agreed upon at the July meeting were unanimously confirmed.

Swansea.—Trade here is very brisk, as evinced by the large increase in the number of arrivals this week. The exports have also been on a commensurate scale, and there is little cause for complaint in any department. A few days ago, Capt. Gardiner, Inspecting Commander of the Coast Guard Volunteers, inspected the port, and has determined on having a powerful battery erected on the parade of the South Dock for the protection of the port. I believe the inspector has put himself in communication with the proprietors of the land, and all things are arranged for carrying out the work without delay. The battery is to be 80 feet in extent, and is to mount guns of heavy calibre, long range. The Deep Sea Fisheries Commissioners have been sitting here during the week, and have taken evidence, Mr. Holdsworth, the indefatigable secretary, being in attendance to conduct the enquiry. The Swansea Hotel Company (Limited) is now moving, and propose shortly to commence building. It is stated that a rival company is in contemplation. Mr. Evan Matthew Richards, the well-known and enterprising partner in the firm of Dillwyn and Co., silver smelters, Swansea, is likely to be brought out for Taunton at the next election. Having had a personal knowledge of the public movements of Mr. Richards for some 10 or 12 years past in this locality, I can safely say that the great aptitude for public business displayed by Mr. Richards in local affairs would be carried to the House of Commons with advantage to any district that might secure him as its representative. The following have been the arrivals of ore during the past week:—Lizzie Lea, from Antwerp, with 220 tons of pig-iron, for W. Forrester; Pembroke, from Antwerp, with 130 tons pig-iron, for W. Forrester, and 183 barrels of nails, for W. H. Tucker; Jean Baptiste, from Cherbourg, with 88 tons iron ore, for the Dowlais Iron Company; Jeune Celestine, from Redan, with 125 tons iron ore, for R. Cowell; Havre, from Havre, with six casks of lead ore; Pathfinder, from Caldera, with 470 tons of copper regulus, for H. Bath and Sons.

REPORT from DERBYSHIRE, YORKSHIRE, and LANCASHIRE.

Oct. 13.—The position of the strike of colliers in South Staffordshire had its effect at the quarterly meeting on Wednesday, and this, coupled with the state of the money market, has materially affected the trade in some districts. Ironmasters are compelled to get their coal from a great distance, which materially enhances the cost of production, and some would fain prefer closing their works rather than submit to the terms of the men. In several districts applications have been made for coal, but in some instances it has been impossible to supply it, on account of the contracts already in hand. For iron for railways there is a brisk demand, but the other departments of the trade are not so active as last reported. The directors of the Great Northern Railway have accepted the tender of Messrs. Knight and Co. (limited), for the construction of the Doncaster and Gainsborough extension of their railway, about eighteen miles in length. The making of the Lincoln and Honington branch has been let to Messrs. Kirk and Parry, who are now erecting additional sheds at the Doncaster works. The length of the line is 19¼ miles. The Messrs. Smith, Knight, and Co., have also taken a contract for the improvement of the loop line of the Great Northern for about eight miles in length.

The rage for joint-stock companies still continues, and every week witnesses the formation of some new concerns. This week a meeting of the firm known as Charles Cammell and Co. (limited) was held. The company has only been formed five months, and on Wednesday the dividend was declared, at the rate of 24 per cent. per annum on the paid-up capital of the company. This company has distinguished itself for the manufacture of steel rails and shot, (the shot for cannon and the steel for railways), and in these departments the firm has won a wide reputation. There is a predisposition amongst merchants in favour of steel, as applied to railways and munitions of war. In respect of rails, it has been proved that those manufactured from steel will endure six times longer than those made from iron. There is great necessity for the manufacture of rails of a harder quality than iron in the construction of railways, from the greater wear and tear which can be obtained from steel in preference to iron. The steel shot, too, which is extensively made by this firm, is in great favour, and we learn that the continental Governments have ordered largely of the same. The shareholders are exceedingly sanguine as to the prospects.

Since the termination of the dispute at the works of Messrs. Bolckow and Vaughan, the men at the various ironworks throughout the district have settled down, their disaffection having been removed. We mentioned in our last notice that a combination between the ironmasters was likely to be the issue of the disturbance, and although the scheme has been abandoned for the present, it is intended to revive it shortly—not for the purpose of aggression so much as the protection of their own just right as employers of labour. The high price of money for the past few months has delayed projected extensions. The strike of the Tudhoe Works has assumed a more satisfactory phase. The loss to the firm of Bolckow and Vaughan through the late strike was several thousand pounds, as the puddlers who ceased work at almost a moment's notice left large quantities of iron in the furnaces, and when it became cold from not being worked it was useless, and considerable damage was also done in the blast-furnaces. Some apprehension has existed in consequence of the scarcity of water, although no actual stoppage of works has yet been reported. The Consett Company, which has only been in existence a comparatively short time, is extending its operations by the erection of large additional blast and puddling-furnaces. Large batches of men continue to arrive at Middlesbro' from Staffordshire. Since the introduction of the iron trade into the district the supply of labourers has become so limited, owing to their obtaining more remunerative employment in the ironworks, that building operations are almost at a standstill. At Middlesbro' Messrs. Hopkins, Lloyd, and Co. have now near completion four furnaces; whilst the proprietors of the Clarence Ironworks have six in the course of erection. The Darlington Ironworks Company, it is said, contemplate some extensive additions to their already powerful furnaces; and the Plate Mills at Newport are completed; and when operations are commenced, employment will be found for more a thousand hands. The total number of furnaces now in actual operation is 75, and 12 only—the smallest number known for some time past—are out of work. Ten of these belong to the Derwent Iron Company. The supply of coal is as abundant as ever.

There was a very interesting *soiree* held on Tuesday evening at Clay-cross, on the occasion of the anniversary of the Clay Cross Institute and Public Hall. It is an institution formed for the purpose of affording a sort of reading-room for the colliers of Clay Cross, and most admirably has it succeeded, under the auspices of Mr. Charles Binns, the manager of the works. The colliers have a news-room, a library, and a bagatelle table, and they also hold Saturday evening recreation meetings, which are attended by hundreds of the workpeople, and have proved a great success.

We hear that the Staveley Coal and Iron Company (Limited) have purchased from Sir Joseph Paxton the whole of the minerals on the Duke of Portland's estate at Bolsover and the neighbourhood.

Important Decision under the Mining Act.—At Rotherham, on Monday, Samuel Pearce was summoned for a breach of colliery rules. The defendant is a miner employed at the Holmes Colliery, near Rotherham, and on Tuesday morning last, when the under-viewer was examining that part of the workings in which the defendant was engaged, he noticed a strong smell of tobacco. The defendant, when charged, admitted he had been smoking. The rules of the colliery provided that "No person shall smoke tobacco or take a naked light, match, or candle where safety-lamps are ordered to be used." Where the defendant was smoking safety-lamps were required to be used. The defendant pleaded guilty. Mr. Bosville said he was sure he need not inform the defendant that most grievous accidents had occurred at collieries, and the Legislature had very properly empowered colliery proprietors to lay down rules for the prevention of accidents. Any person who committed a breach of those rules was liable to be committed for any period not exceeding three calendar months, or the offender was liable to a fine. Not a shadow of suspicion had been hinted that the defendant, by smoking, had intended to do either damage to property or injury to life or limb, or that he had been guilty of any moral offence; but his conduct had placed life and property in much imminent danger. Painful as it was to the Bench, a sense of public duty compelled them to make an example of the defendant, simply to deter others from pursuing a similar course, and not from any feelings of revenge. Mr. Cooper, the manager at the colliery, said the rule referred to was often violated by the men smoking, but evidence of the fact was not always available. Mr. Bosville said that if any of the offenders were brought before the Bench in the future, more severe examples would be made of them. The defendant was then committed for one month with hard labour. Mr. W. Hirst appeared for the company in support of the information.

Charge under the Mines' Inspection Act.—At Stourbridge, John Evason, coalmaster of the Lye Waste, was charged with having neglected to give notice within twenty-four hours to the Secretary of State of an accident which occurred at his pits on May 4. He was further charged with having neglected to give the usual notice of the same accident to Mr. James Philip Baker, Her Majesty's Inspector of Mines for the district. Mr. Bolton, solicitor, appeared to prosecute, and said that the Inspector was not desirous of pressing the case heavily against defendant. The Bench fined him 1*l.* and costs in the first place, and in the second ordered him to pay costs.

How Colliers' Strikes are dealt with in France.—The Correctional Tribunal of Valenciennes has just tried 29 pitmen, employed in coal mines near that town, on a charge of coalition for obtaining an advance of wages, and of having used violence to compel other men to join them in a strike. According to the evidence given, it appears that some of the men, imbued with communistic principles, persuaded their companions to enter into a coalition for the purpose of obtaining a uniform pay of 3 frs. a day for all the pitmen, without regard to their capabilities. Instead of making known their demands to the managers, the accused went to the pit's mouth on the nights of the 20th and 21st., and compelled all the men to cease working, at the same time extinguishing the fires of the engines used for drawing up the coals. Order was, however, restored on the 22d by the armed force, and the offending parties were arrested. The charges having been fully established, the Tribunal condemned seven of the accused to be imprisoned for six weeks, fifteen for a month, five for a fortnight, two for a week, and all conjointly to pay the costs.

How Coal may have been Formed.—That the ancient seams of coal were produced for the most part by terrestrial plants of all sizes, not drifted, but growing on the spot, is a theory more and more generally adopted in modern times; and the growth of what is called sponge in such a swamp and in such a climate as the great Dismal (of America) already covering so many square miles of a low level region, bordering the sea, and capable of spreading itself indefinitely over the adjacent country, helps us greatly to conceive the manner in which the coal of the ancient carboniferous rocks may have been formed. The heat, perhaps, may not have been excessive when the coal measures originated, but the entire absence of frost, with a warm and damp atmosphere, may have enabled tropical forms to flourish in latitudes far distant from the line. Huge swamps in a rainy climate, standing above the level of the surrounding firm land, and supporting a dense forest, may have spread far and wide, invading the plains, like some European peat-mosses when they burst, and the frequent submergence of these masses of vegetable matter beneath seas or estuaries, as often as the land sank down during subterranean movements, may have given rise to the deposition of strata of mud, sand, or limestone, immediately upon the vegetable matter. The conversion of successive surfaces into dry land, where other swamps supporting trees may have formed, might give origin to a continued series of coal measures of great thickness. In some kinds of coal the vegetable texture is apparent throughout under the microscope; in others it has only partially disappeared; but even in this coal the flattened trunks of trees of the genera *Lepidodendron Sigillaia*, and others, converted into pure coal, are occasionally met with, and erect fossil trees are observed in the overlying strata, terminating downward in seams of coal.—*Sir C. Lyell.*

NOTES ON LECTURES BY Dr. PERCY AT THE ROYAL SCHOOL OF MINES.

Metallurgy is the art of extracting metals from their ores, and adapting them to the purposes of manufacture. The term metal is used at the present time in a somewhat conventional sense. Formerly it was supposed that metals were characterised by properties peculiar to them, such as weight and lustre, but we are now acquainted with metals which are lighter than water, and with bodies not metals with brilliant lustre. There are certain physical properties in most metals which distinguish them one from another—*e.g.*, all metals are solid, except mercury. With regard to the action of heat on metals, the following division is useful:—1. We have those metals fusible below a red heat, such as lead, tin, and others.—2. We have those fusible above a red heat, but at a temperature easily attainable, as silver, copper, gold.—3. We have those to be melted only at the highest temperature, as nickel, iron, manganese.—4. Those not to be melted at the highest temperature of our furnaces. Unfortunately we have no good instruments for measuring high temperatures. We speak ordinarily of red and white heat, but these terms are differently applied by different observers. There is a pyrometer which may one day become of good service, invented by a Swede, which consists of a platinum ball, which is placed in the furnace the temperature of which is to be ascertained. When heated the ball is removed, and suddenly immersed in a vessel containing a definite quantity of water, of a given temperature. The amount of water vaporised, and the temperature to which it is raised, are the data for the calculation of the heat of the ball taken from the furnace. Metals are either fixed or volatilised when heated. Here we use the term fixed as applying to those metals which remain unchanged at the highest temperatures of our furnaces. Then we have volatile metals. Fusion almost always precedes volatilisation, and, so far as we know, arsenic is the only exception to this rule, this metal passing directly from the solid to the gaseous state. Fixed, in the sense we have used it, as applying to metal, is of necessity a comparative and conventional term, for many of the ordinarily fixed metals may be volatilised at an extraordinary heat. We find that metals pass rapidly from the solid to the liquid state. One would suppose that many metals would pass through a pasty state previous to melting, but this is not so. There is one metal, however, iron, which continues in the pasty state through a considerable range of temperature, and it is from this property that we are enabled to weld it.

The specific gravity of metals ranges between 8 and 22; it varies with the treatment the metal has received. It is generally supposed that the process of hammering and stamping increases the specific gravity after fusion, but this is not so, for by such processes you only fill up the cavities which are necessarily formed when a molten mass of metal cools; in no way can you increase the specific gravity of the mass by pressure. Bismuth is supposed to be an exception to this, but it does not seem to be at all a certain fact.

Crystallisation is a characteristic of all metals after fusion. The metals which are brittle are highly crystalline. Take, for example, antimony or bismuth, both are crystalline and brittle. But even this crystalline character is common to the soft and malleable metals, such as lead and tin, which, though when fractured do not present definite crystals, are distinctly crystalline. We may prove the crystalline structure of metals by acting on their surfaces by acids. Metals crystallise in one of two systems, the cubical or the rhombohedral, usually in the former, but bismuth is an exception, and crystallises in the latter. Metals may be crystallised either by solidification after fusion, or by condensation from a state of vapour as arsenic, or by electrolitic decomposition. As regards the first mode, it is obvious that slow cooling is favourable to crystallisation, whilst rapid cooling is favourable to the opposite effect, and tends to produce the vitreous state of metals.

The fracture of metals varies much; the following are the varieties in adopting which it is understood that the fractures are made at definite temperatures:—We have, first, fibrous fracture. Secondly, we have crystalline fracture, such as that of zinc and specular iron. Thirdly, we have columnar fracture. Fourthly, granular fracture, as in pig-iron. Fifthly, conchoidal fracture, as in the alloys of zinc and copper. Some metals which are crystalline may be made fibrous. Thus, take a piece of copper and nick it on one side, and bend it to and fro many times; on breaking it we shall then find it fibrous almost to silkiness. In this case fibrous fracture is the result of bending. Copper is a crystalline metal, and by bending you extend these crystals one into the other, and draw them out into fibres. In the case of iron treated in the same way, it is partly the result of the bending, and partly the result of a pre-existing structure, which structure depends on the treatment it has previously received. If we take a piece of thin rolled fibrous iron and heat it in a crucible red hot, we destroy its fibrous character, and substitute a crystalline one, which may again be replaced by the fibrous on heating it. The fibrous appearance of rolled iron depends much on the mode of breaking it, for if broken rapidly the same piece will appear crystalline, which if broken slowly would be quite fibrous.

Malleability may be expressed by the word hammerableness. It is the property of permanently extending in all directions without rupture, by pressure gradually applied, or by impulse. It is opposed to brittleness. It may be much affected by temperature, and this is most important in certain manufactures. For example—zinc is a highly crystalline metal, which it is impossible to roll when cold; but if we heat it up to a certain temperature, about 150° centigrade, it becomes a most easy matter to roll it out, and, curiously enough, when the crystals are to a certain extent destroyed by the rolling you may continue the process when the metal is quite cold. In rolling zinc we destroy its crystalline character, which character may be restored by heating the metal to a point somewhat below its melting point and allowing it to cool. In this heating the particles rearrange themselves. The process of communicating softness to a metal by heating it, is termed annealing. In the case of some metals, to insure softness it is necessary to cool slowly, in the case of others to cool quickly. Some alloys and mixtures of metals undergo changes on being kept, without any assignable cause. Brass has peculiarly this property of becoming brittle after a time.

Ductility is the property of permanently extending by traction, as in wire drawing. All ductile metals are malleable, but not necessarily so in ratio to their ductility. Tables comparing the malleability with the ductility of metals are to be found in all chemical works.

Tenacity, or tensile strength, as engineers term it, is the property of ductile metals to resist rupture by tearing asunder. It is great in proportion to the weight which a given wire will support without breaking. Tenacity is much affected by the molecular condition, and especially by the crystalline structure of a metal, and foreign matter affects it greatly. Variation of temperature causes a variation of tenacity.

Toughness. This word may be used in two distinct senses. It is the resistance of fracture by tearing or bending.

Softness, is a property which some metallic masses possess of yielding to compression without fracture, and not returning to their original form after removing the source of compression. It is essentially opposed to elasticity, and is a property peculiarly necessary in those metals used for dyeing purposes. Soft, is of necessity a comparative term. Temperature affects the softness of most metals. Metals are often spoken of as soft or hard; the hardest and toughest alloy known is a compound of iridium and osmium. The power which metals possess of conducting heat and electricity is one of the most prominent characteristics. The power of conduction varies with the temperature and the molecular condition of the metal.

Decimal Reform.—An influential meeting of commercial men was held yesterday in Liverpool, at which it was resolved to form a provisional committee with a view of establishing a branch of the international association for obtaining a uniform decimal system of measures, weights, and coinage.

Interesting Copper Casting.—Mr. Thornton, of the Elms, has in his possession the largest copper idol ever brought to this country, and one of the modern wonders of the world. Under a shed in his coach-yard is no less a personage than the god Buddha, measuring over 7 ft. in length, and one of the most marvellous pieces of copper casting ever found. Direct from one of the lower rooms of his temple, where he had been hidden away some 2000 years ago, his godship has been brought to the New World capital of copper and bronze castings. We believe that it is Mr. Thornton's intention to present the image to the town, and it will probably be deposited in the Midland Institute. Thus, after a lapse of 2500 years, Buddha will be enthroned again, in a temple better worthy of him, because devoted to higher and more ennobling pursuits than the one in which he found his first resting-place in the temple of Seettangang.—*Birmingham Post.*

FOREIGN MINING AND METALLURGY.

We are now enabled to present from official data the imports and exports of pig and iron into and from Belgium during the first eight months of 1864, as compared with the corresponding periods of 1863 and 1862. First with regard to imports, the totals stand thus:—

	1864.	1863.	1862.
Iron minerals ..... Tons	142,058	109,746	70,196
Rough pig	5,083	4,603	1,929
Unworked steel	1,546	1,177	1,272
Worked steel	425	359	333
The exports foot up as follows:—			
Rough pig to England	5,364	11	20
Ditto elsewhere	15,176	15,654	23,877
Worked pig	2,451	1,064	2,037
Iron minerals	131,483	148,516	135,679
Nails	8,788	8,688	8,551
Wire	1,074	219	1,021
Rails to Low Countries	13,087	2,575	214
„ England	1,117	—	—
„ France	1,365	3,209	11,673
„ Portugal	3,515	—	—
„ Spain	24,571	13,245	5,901
„ Italy	2,916	6,353	2,370
„ Switzerland	32	2,133	282
„ Roman States	360	3,180	—
„ Egypt	320	—	—
„ United States	3,630	—	—
„ Elsewhere	509	145	4,615
Plates to Russia	503	159	580
„ Zollverein	103	45	75
„ Low Countries	2,906	729	522
„ England	1,242	—	¼
„ France	5,738	4,594	2,768
„ Switzerland	1,281	837	975
„ Elsewhere	196	88	254
Other articles	32,093	22,320	13,914

The total exports of rails from Belgium in the first eight months of 1864 were thus 52,621 tons, against 30,939 tons in the corresponding period of 1863, and 25,054 tons in the corresponding period of 1862. The external demand for Belgian rails has thus considerably increased during the last two years. The exports of plates have also been steadily expanding, the aggregate shipments to Aug. 31 this year having been 11,967 tons, against 6242 tons in the corresponding period of 1863, and 5174 tons in the corresponding period of 1862. The exports of iron wire have also materially increased this year. New outlets, or almost new outlets, and especially the augmentation of the deliveries to Holland and England, have contributed to maintain the activity of this article. The quotations of refining pig have displayed an upward tendency, although hitherto the prices of this latter article have not risen in proportion to the advance in iron. The scorim of old forges, designated under the name of Sarrazin, which were at one time greatly sought after by the Charlerol blast-furnaces, in consequence of their cheapness, are now neglected. It appears that this dross has produced iron of bad quality, and *inter alia* rails, some of which have not been accepted by railway companies. The minettes of the Luxembourg and Moselle districts are also in less favour; it is stated that they produced too dry iron, and forge-masters display a tendency to return to oligiste minerals. Hard iron minerals are rising, as are good oligiste minerals. Minerals abound for the fabrication of bad pig, that is tender iron, while they are becoming scarce for the good pig, styled hard iron. At Moriamé, Fiorennes, Fraire, &c., all the disposeable stock of hard iron minerals has been for some little time at high prices. The minerals of Ligny, Fleurus, and St. Amand are in great favour. A Charlerol letter says:—"The embarrassments occasioned to English forgemasters by strikes of coal miners and other workmen, and the uneasiness which results as regards the regular and convenient delivery of contracts undertaken on foreign account by English metallurgy, have caused a movement to Belgium of business upon which we could scarcely count. This situation of English industry will not only have the effect of transferring to foreign establishments a part of the business with which England has been favoured; but an advance will, besides, result in all siderurgical products. Expecting this result, Belgian forgemasters show themselves reserved with regard to the acceptance of new contracts which come to them from England. Our relations with this country must increase, under any circumstances, and they would already have acquired more importance than they have hitherto done if we had a little more confidence in our forces and resources. Iron is held firmly, and, if there is an appearance of a change in prices, the movement is upwards; at present iron is obtained easily at 7*l.* 4*s.* per ton. Mention is still made of the creation of new siderurgical works, and the shareholders are even mentioned, while the sites where they will be constructed are designated. Time will show whether these reports are well founded or otherwise. As regards coal, the quantity loaded at the stocks is tolerably important, and, if affairs are not checked by freights, the season may be said to commence tolerably well. But this is not the sole circumstance which disquiets coal owners; their attention has been directed to the supply of rolling stock on the principal railways, which already leaves much to be desired, although we have not reached the period of full winter deliveries. Grave and serious inconveniences appear to be threatened to coal-workers when the winter season arrives, unless measures are taken at once to avoid them." The coalowners of the Lower Sambre have had another meeting on the subject of the line from Tamines to Fleurus. Notwithstanding the formal promises of the Minister of Public Works, it appears that this section of the Tamines and Landen line has not been commenced, and it is now even stated that it will not be made.

The foreign copper markets continue destitute of all animation. Chilian maintains itself at Havre at the established rate of 87*l.* per ton (Paris conditions). Advices from Amsterdam describe the situation of the article on the Dutch market as follows:—"The firmness which we indicated in our preceding circular at the close of August was maintained during the first few days of September; and, in consequence of the reticence of holders, the price rose even to 62 fls. Affairs at the same time remained insignificant, because this price was very much above what the foreigner was willing to pay. Sellers having shown themselves more easy, some schedules brought on the market sufficed to make prices give way, and they fell little by little to 60½ fls., without, however, much activity being witnessed. During the last fortnight of September the market was very quiet, but no disposition has been remarked to sell below 60½ to 61 fls.; the last quoted price of Banca at Rotterdam and Amsterdam was 61 to 61⅛ fls. In presence of the firm tone maintained by holders, a little revival in the demand would bring about an improvement; but, as real orders for consumption make default, and as financial difficulties, especially abroad, are not yet smoothed down, there is scarcely any reason for forming exaggerated expectations in this regard." The position of the stock of Banca tin was as follows, Sept. 30:—

	1864.	1863.	1862.
Stock, Aug. 31 ..... Ingots	98,900	100,089	105,406
Deliveries in Sept.	13,950	5,453	12,119
Stock, Sept. 30	84,950	94,636	93,287

The arrivals for the Society of Commerce this year were 38,284 ingots, against 33,762 ingots at the corresponding period of 1863, and 31,607 ingots at the corresponding period of 1862. The Paris tin market has been heavy, but prices have remained without variation. Some parcels of tin presented in the Berlin market have been negociated at former prices. At Hamburg, prices have remained nominal, and without change. On the other markets the same calm has prevailed. Affairs in lead have been limited at Paris to the strict requirements of consumption, rough French making 22*l.*, and Spanish 22*l.* 12*s.*; rolled lead making 23*l.* 10*s.* per ton. At Rotterdam the article remains quiet, but is a little firmer; Stolberg and Eschweiler have made 11¾ fls., and other marks 11¼ fls. On the principal German markets, and especially at Berlin, Hamburg, Cologne, and Stettin, speculation has abandoned the article, which is only purchased in small lots to meet daily wants; for large parcels to be delivered at future dates there would be sellers at drooping prices; no change has taken place, however, in previous quotations at present. Zinc remains in the same position. In presence of the extreme reserve of purchasers, holders are obliged to reduce their prices, but notwithstanding the concessions to which they have submitted the demand has not revived, and on the principal markets of the Continent the calm continues. Zinc remains without movement at Paris, and prices are not very firmly sustained, rough Silesian making 21*l.* 8*s.* There has not been much doing at Hamburg, and prices have experienced a new reduction. At Breslau the article is only in little demand, ordinary marks no longer finding purchasers. On the secondary markets, zinc has been dealt in in small quantities, and at the previously quoted rates to meet the requirements of consumption.

The situation of metallurgy in the Moselle group improves every day. The orders received are amply sufficient to maintain activity in the works. A great number have orders for several months in advance, and prices are extremely well sustained. The house of Wendel has just put in train five furnaces—two at Hayange, two at Moyeuvre, and one at Styring. Rolled iron is quoted easily, and by continuation at 8*l.* 8*s.* per ton. Rather large quantities of puddled iron produced from coke-made pig are also sold; they are purchased generally by houses of the groups of the Nord. At Paris prices have slightly fallen, in consequence of the competition which the different French groups sustain with each other. At St. Dizier the slight alteration recently noticed is sustained, all the forges maintaining full activity. Charcoal-made pig has only a purely nominal quotation; there are purchasers at 4*l.* 10*s.*, and sellers at 4*l.* 12*s.* per ton. Some small placements of coke-made pig (the coke of the district) have been made of late; 3*l.* 12*s.* per ton was accepted without difficulty. The superior quality of the minerals used causes this product to obtain a better price as compared with the similar pig of neighbouring groups. Rolled irons are firm at 9*l.* per ton; 8*l.* 16*s.* is a price rarely accorded even to large houses. Hammered irons have a more easy sale; prices vary according to the works from 10*l.* 4*s.* to 10*l.* 16*s.*; axles make 11*l.* to 11*l.* 4*s.* Machine, No. 20, is in demand at 9*l.* 4*s.* to 9*l.* 8*s.* The foundries are rather better employed. The annexed figures show the imports into France of pig, iron, and steel during the first eight months of the current year:—Pig, *en masses* from England, 12,988 tons; ditto, from Belgium, 5015 tons; refined pig, termed *mazés*, 5 tons; pig of every other kind, 2310 tons; steely pig, 10 tons; total, 20,328 tons; temporary imports, 110,728 tons: general total, 131,555 tons. Iron in bars from England, 81 tons; ditto from Belgium, 39 tons; ditto from other sources, 17 tons; rails from England, 62 tons; rails from Belgium, 234 tons; ditto from other sources, 1 ton; angle and T-iron, 58 tons; rough iron, 10 tons; plates, 21 tons; sheets, 38 tons; iron wire, 267 tons; tinned, coppered, and zinced iron, 406 tons; total, 1233 tons; temporary admissions—iron, 25,911 tons; plates, 7722 tons: general total, 34,866 tons. Steel in bars of every kind, 439 tons; rolled, filed, &c., 406 tons—total, 845 tons. It will be observed that the greater part of these imports are admitted temporarily. These deliveries are exempted from Customs' duty, in consequence of the application of the system of warrants, and they leave France in a more advanced stage of fabrication. Annexed is the movement of these temporary admissions during the first eight months of 1864:—

	Imports.	Re-exports.
Pig ..... Tons	110,728	29,145
Iron	25,911	53,435
Plates	7,722	10,665

We may advantageously group together a few miscellaneous facts. The prefect of the Haute Marne, in his report to the Council-General of the Department, casts a rapid glance over the state of metallurgy, and sums up the position of the blast-furnaces of the group in the following terms:—"The situation remains the same as was indicated by my predecessor in his report in 1863; this large production, constantly increasing, is not a certain indication of the prosperity of pig-producing industry, as present quotations, fallen to 4*l.* 16*s.* per ton for refining pig are scarcely remunerative. The very great reduction in quotations has rendered it necessary for industrials to manufacture largely, in order to diminish their general

expense; such is the reason of the increase of production. Refining pig is sold with difficulty, the forgemasters seek to manufacture pig only to convert it into iron in their forges, and the blast-furnaces devoted to casting pig diminished their production in 1863. Pig can in effect be converted into iron, and a tolerably remunerative return may be found in the price of the iron. On the other hand, with regard to casting pig, it is difficult to contend with the pig of England and the Moselle." The exports of coal and coke from Belgium in August showed a decrease under both heads as compared with August, 1863. Nevertheless, if we take the movement since the commencement of the year, we arrive at an export for eight months of 2,231,290 tons, against 2,062,938 tons in the corresponding period of 1863, and 1,969,886 tons in the corresponding period of 1862. The Providence Forges Company will pay Oct. 31 the dividend for the exercise 1863-4, or 4*l.* per share. The Grand' Combe Mining Company will pay Dec. 31 the balance of the dividend for 1863, or 1*l.* 6s. per share. The Loire Mining Company will pay Oct. 16 a dividend for the first half of 1864, or 8s. per share.

WELSH GOLD, AND THE PROCESSES FOR EXTRACTING IT.

The development of the auriferous deposits of the western territories of the United States has caused increased interest to attach to the consideration of the several processes by which the precious metal may be economically separated from the matrix in which it is contained, and in a recent number of the *United States Mining Journal* there appears a succinct and carefully-written paper upon the treatment of gold ores. It is observed that the fate of most of the mining enterprises of the western territories depends in a great measure upon the satisfactory solution of the problem for the thorough desulphurisation or roasting of the sulphuretted ores by a simple and practicable process, and as this remark would apply with equal force to the gold mining districts of Wales, or at least to many of the mines in them, where sulphide ores have proved most inconvenient to treat, the information furnished may fairly be availed of. These sulphurets contain the precious metals, either in the metallic state or in the chemical combination; and, until the problem of their treatment is solved failure, or only partial success, will be the reward of the miner.

It is true that various attempts have been made to do this; but without detracting a single iota from their respective merits, it must be admitted that they have not yet satisfied the requirements of the case, the deficiencies lying partly in inherent sources of failure in the methods themselves, and partly in the application of unreliable or inappropriate apparatus.

Under these circumstances, and considering the ignorance which still seems to prevail in regard to the extraction of gold (in particular) from its ores, a brief consideration of the various modes in which this may be accomplished may not be without interest.

There is, first of all, a distinction to be made between those ores which contain gold in its free metallic state in quartz and other vein stone, or in oxidised ferruginous matter, and those in which the gold, or a portion of it, is intimately associated with sulphurets of iron, copper, &c., either in a metallic form or as a sulphuret. While the ores of the former class, after being pulverised, may at once be subjected to some gold-extracting operation, those of the latter class require a previous decomposition, so that the particles of gold enclosed in the crystallised pyrites may be see free, and the sulphurets of gold reduced; otherwise the yield—for instance, by direct amalgamation—will seldom rise above one-fifth of the gold contained in the ore, except in cases where a large amount of gold is visibly disseminated through the pyrites. In these cases, especially when no proper facilities for roasting are at hand, it may be expedient to amalgamate the crude ore; but the tailings, in which a large portion of the gold will remain, should be carefully saved for future treatment by a more rational process. In South America, and in some of the southern states of this republic, sulphuretted gold ores have been treated in the following manner:—The pulverised ore was amalgamated, yielding about 30 per cent. of gold; the tailings were then allowed to decompose for several months, under the natural effect of moisture, heat, and exposure to the atmosphere, after which they were again amalgamated. At the second amalgamation the yield of gold was as great as at the first. Under this rude process some 40 per cent. of the gold was finally lost.

Passing by the primitive methods of collecting the precious metal from pulverised ores by means of hides, blankets, grooved inclines or riffles, cradles or rockers, pans, and other contrivances, in the application of which the specific gravity of the metal is used as the sole agent for collecting it, we come to the process of amalgamation with mercury, by means of which, in all parts of the world, by far the greatest amount of gold has been and is still obtained. The modes of amalgamation may be divided into open amalgamation, close amalgamation, dry amalgamation, and amalgamation by means of mercurial vapours, each of which has, probably, its advantages and defects. Open amalgamation is characterised by the conveyance of the pulverised ore by a current of water through apparatus charged with mercury. Rockers, stirring tubs, Tyrolese bowls, and their various modifications, form the apparatus commonly employed. The previous crushing of the ore is generally performed by stamps, after which it is not unfrequently passed through Chilian, or drag mills, which are also charged with mercury, and thus serve the double purpose of grinding the ore still finer, and arresting a portion of the gold. This operation, although very common, is exceedingly wasteful; and all that can be said in its favour is that it allows the working of large quantities of ore with comparatively little machinery; for this reason it is properly applicable only to poor ores. An inherent source of loss in this method is the following. Superficially considered, it would seem that the particles of gold should, in passing with the water through the amalgamating apparatus, gradually sink, by their specific gravity, to the bottom, and thus touching the mercury, be taken up by it. Experience, however, has disproved this theory; and closer investigation of the subject, together with experimental demonstration, establishes the fact that the precious metals, especially gold and platinum, have the peculiar physical property of condensing on their surfaces a film of air or any other gas. This film of condensed air, adhering to the small particles of gold, neutralises their specific gravity, and causes them to float, for a time at least, in water. Anyone taking a pinch of gold dust, and dropping it into a tumbler of water, will be satisfied of this. Fine particles of gold, thus suspended in water, will pass through all open amalgamating apparatus, of whatever number and construction, and finally be washed away. It has been found that scarcely ever more than one-half, and frequently less than one-third, of the gold contained in the ore is saved by this operation; although the yield may be somewhat augmented by the use of hot water, or by heating the apparatus employed.

By the close amalgamation method a sufficient quantity of water is added to the ore (pulverised dry by means of rollers, or other suitable machinery) to form with it a thin pulpy mass, which is then agitated in an amalgamating apparatus with mercury, for a longer or shorter period, determined by experience as requisite for absorption of most of the gold. The tailings are then washed off by means of a current of water, leaving the amalgam, to which a new charge of ore is added, and the operation is repeated until the mercuryhas become sufficiently charged with gold, when the amalgam is separated by straining. The principal apparatus with which this method is carried out are barrels revolving upon horizontal shafts—Chilian and drag mills. Of these, the latter two offer the advantage of re-grinding the ore, and thereby ensuring a higher yield. They were formerly built mostly of stone, but, iron Chilian mills having been introduced, modifications of the drag-mill, built of the same material, have followed, which are known as "Freiberg," or "Friesburg," pans, a name which has no significance. It is apparent, from the very nature of this process, that by its proper application all the free gold contained in the ore might be extracted, if the operation were only sufficiently prolonged; but, as there is a certain limit which must be set in practice, no such complete results need be expected. Under the most favourable circumstances the yield may be brought up to 80 per cent., and, perhaps, more, the process lasting 16 to 24 hours for the barrels, 10 to 12 hours for the Chilian mills. These periods of time, of course, vary in consequence of the better or poorer construction and condition of the apparatus.

According to the dry amalgamation method, the pulverised (and sometimes oxidised) ore is brought into direct contact with the mercury, under such conditions that each particle of gold may be absorbed. This seems to be theoretically the very ideal of an amalgamating process, as there is no medium present through which, on the one hand, the gold might be carried off, or, on the other hand, the contact of the two metals might be prevented. Unfortunately, however, there is a practical obstacle, very difficult to overcome. It is a peculiar property of mercury, that after it has been once minutely divided or "cut up," by friction or otherwise, it will not re-unite into globules, but remains as "flour" among the tailings. A patent has recently been obtained for a dry amalgamator, the construction of which promises more favourable results; but as it has not yet been subjected to a thorough trial, it is impossible to pronounce upon its merits.

In the process of amalgamation by means of mercurial vapours, the pulverised ore is suspended or agitated in an atmosphere of mercury in a gaseous state. A contrivance to this end has also been recently patented, but still awaits the verdict of experience. It is sufficient here to remark that the difficulty regarding the "flouring" of the mercury appears to attach to this operation in a still more fatal degree than to the foregoing. It is a serious question, moreover, whether this sort of amalgamation can be carried on to any large extent without endangering the workmen's health.

[*To be continued in next week's Journal.*]

THE COAL FIELDS OF SOUTH WALES.

After a large expenditure, considerable delay, and some disappointment, the extensive and admittedly valuable property possessed by the Neath and Pelenna Colliery Company seems likely to be efficiently and vigorously developed. A deputation formed of some of the members of the newly-constituted board of directors visited the colliery a short time since, with the view of making a personal investigation into its working and management, and its value and prospects; and the issue of this inspection is that the property is of considerable value, and only requires proper management and care, and a sufficient amount of capital, thoroughly to develope its capabilities, in order to become a very remunerative concern. It appears there are two levels now open, and in complete working order, and together are capable of turning out at least 600 to 800 tons per day, but with the present means of transit not more than 100 tons per day can be removed. The present horse-tramway, it is estimated, can by an expenditure of about 2000*l.* be made into an effective broad-gauge locomotive line, by which means 150 to 200 tons might be removed. If, however, a proper connection were made with the Vale of Neath Railway, the quantity daily produced could easily be increased to more than 500 tons, and for which a market could readily be obtained. After a careful calculation, the deputation have concluded that a daily out-put of 100 tons would scarcely leave any profit, that 200 tons would give a fair one, but that 300 tons would afford a handsome dividend to the shareholders. In this opinion Mr. Joshua Richardson fully agrees, and his testimony is of the greater value, seeing that he worked this colliery about 20 years since.

The cost of constructing a narrow-gauge branch railway to connect the colliery with the Vale of Neath Railway—a distance of about four miles—will not exceed 8000*l.*, and it is calculated that by using it for other works, in addition to the tonnage received upon the coal transmitted by the Neath and Pelenna Colliery, a moderate return upon the outlay would be made.

Among the several favourable reports upon this colliery is that of Mr. Henry Lewis, mining engineer, who states that he visited the property at the request of the board, for the purpose of enabling them to judge whether, if the colliery were properly worked and judiciously managed, it would become a source of profit to the shareholders. Mr. Lewis states that the seams at present worked are the Mountain Vein and the Wennait Riders. Very little of the former has been worked at present, and from what he was able to judge from its appearance, he should say it was highly bituminous, and would sell very well as house fire-coal; and as there are very few seams in the district that answered for this purpose, it would, he had no doubt, demand a ready market at a good price. The Wennait Riders, like the Mountain Vein, is worked by means of a level; and in addition, there is an old level driven to the Mountain Vein by the former lessees, and about 25 acres of the coal worked; this might be cleared up at a small cost, and then there would be three levels, by which 1000 tons per day might easily be got. The maximum total cost, including every charge, is computed at 6s. 6d. per ton, while the present prices are (free on board at Briton Ferry)—hand-picked coal, 8s. 6d.; mixture, 6s. 6d.; and slack, 4s. per ton. The present "get" is about 100 tons per day, and averages 30 tons of hand-picked coal, and 70 tons of mixture—this would make an average price of 7s. 1d. per ton. This proves that at present there is only a small profit, but Mr. Lewis has well considered the matter, and feels confident the colliery will pay well if the transit both underground and on the surface is put upon a different principle. At present, the coals from the Mountain Vein are brought out by means of horses, each horse bringing out about 20 tons per day, at a cost of 8s., or 3d. per ton. It is then let down an incline to the level of the Wennait Riders, at a cost of 1d. per ton; from thence it is taken, by means of horses, down the tramway, a distance of three-quarters of a mile, and loaded into waggons on the South Wales Mineral Railway, at a cost of 7d. per ton. So that at present it costs in haulage alone, before it leaves the colliery sidings, no less than 11d. per ton. Most of the coals from the Wennait Riders come at a distance of 1¼ mile before they reach the surface, thus costing 4d. per ton in haulage, and the same price as the Mountain Vein down the siding on the South Wales Mineral Railway. This serious item, therefore, must and can be remedied before the colliery will pay.

It is advised by Mr. Lewis that all the coals should be brought out by steam-power instead of horses, which might easily be done by fixing a stationary engine at the mouth of each level. There is now upon the ground a small beam-engine that might easily be made available; this done, Mr. Lewis could safely say that the coals might be brought out of the mine at 1d. per ton.

The port now used by the company is Briton Ferry, but Mr. Lewis considers that Swansea would be preferable, as there vessels can always be commanded, and at much easier frights. He strongly urges the construction of a narrow-gauge line from the colliery to the Vale of Neath Railway, as it would effect a saving, as compared with the present cost of carriage, of about 1s. 8d. per ton. "I must say that the coal field is a good one"—these are Mr. Lewis's own words—"and if once the narrow-gauge railway were made, you would open all the estate, and make it one of the best paying collieries in South Wales."

In order to enable the executive to adopt these valuable recommendations, with the view of making the property of the Neath and Pelenna Company "one of the best collieries in South Wales," an additional capital of about 6000*l.* is required, by the judicious expenditure of which it is believed the company will be put into such a position as to be most beneficial in every way. Judging from all the facts of the case, it would seem a most impolitic step for any body of shareholders to adopt to allow a property, upon which they have already expended so large an amount of capital, to pass from their hands, when, according to the testimony of all practical authorities who have inspected it, there seems every reason to believe that by a comparatively small outlay in providing an effective working plant—for that is all that appears to be required—the colliery will yield remunerative and permanent returns.

IRON RUST.

Rust has played, and seems destined to play, a large part in human affairs. There is every reason to believe that the iron age preceded that of bronze, but the strong affinity of iron for oxygen has probably swept away the iron vestiges that would have thus substantiated the deductions of the metallurgist. Up to the present, rust has played more havoc with our iron-plated ships than has been achieved by shot fired in anger; and when the destruction through rust of the Menai and tubular bridges is said to be a mere question of time, it is well to enquire into the nature of rust.

The formation of rust on iron may be called a slow combustion or a slow union of oxygen with the iron. When iron becomes covered with a reddish-brown crust, which gradually spreads and deepens until the iron is eaten through and through as if by a cancer, we say that it oxidises, corrodes, or rusts. The word oxidation best expresses this action, as it is simply a combining of oxygen with the iron, in the proportion of two grains of the former to seven of the iron itself. When rust has once fixed its tooth in the iron, the process goes on rapidly; each spot of rust forms a voltaic pile in which the iron is positive, and, the moisture of the air being decomposed, the hydrogen is set free and the oxygen combines with the iron. But iron does not rust in pure oxygen. The presence of other substances is necessary to induce the combination, and carbonic acid and water, both of which are contained in the atmosphere, are the two most common agencies. Very small quantities of acid, and many salts, especially common salt, sal ammoniac, and acid salts, have also great influence. The mere spilling of an ounce or two of hydroc loric acid in a store of hardware would be sufficient to spoil all the goods, and contact with Kyanised timber rapidly oxidises iron, especially in damp situations. The contents of the water in which iron may be immersed are no less important in their influence. According to Mr. Mallet, in foul standing sea water the rusting of iron is at a maximum. In clear running river water, on the contrary, iron corrodes very little more than when exposed in the atmosphere to all changes of weather and temperature. The water perfectly free from air, oxidation does not take place. So much for the nature and causes of rust.

The means to be adopted to counteract the formation of rust may be classed into:—1, A choice as to the nature of the iron; 2, the use of galvanism; 3, the employment of protective coatings. To insure comparative freedom from rust, cast-iron should be uniform, bright, and hard. The aggregate condition of the whole mass, the galvanice quality of the surface exposed to corrosion, and regularity of colling when cast, are also important conditions. Wrought-iron and steel consist, as Mr. Mallet has pointed out, of two or more different chemical compounds, coherent and interlaced, of which one is often electro-nagitive to the other. The electro-positive body suffers first from corrosion, and the electro-negative portions of the iron do not oxidise until nearly the whole of the other portions are removed. Generally speaking, wrought-iron suffers nearly three times as much as common cast-iron from corrosion; spiegeleisen, on the other hand, scarcely at all. Speaking of the nature of iron, we may mention here that Mr. M. Poole took out a patent in 1845 for making iron hard, durable, and free from oxidation, by employing ferrocyanide of sodium, barium, calcium, or other alkalies or alkaline bases, in the manufacture. The use of galvanism is based upon the phenomenon that it is the electro-positive substance which is first oxidised. Zinc, being very electro-positive to iron, is the metal most employed for diverting the oxygen from the iron to itself. Tin is much less electro-positive, and iron is tinned rather to give it a durable coating than for any galvanic purpose. Copper is electro-negative to iron, and if used galvanically would actually accelerate rusting. If brass be employed, the proportion of copper in it must not, therefore, be more than 31 per cent. The first patent for preserving iron from rust by galvanism was taken out in 1830 by G. G. Bompass; and in the same year John Revere patented the fixing of zinc protectors to the cast-iron cross-stud of chain cables, and to other iron details. The large iron pans at salt-works, in which salt ley is evaporated, are likewise preserved from rust by zinc being applied to the corners. Unfortunately, the preservative action ceases as soon as the zinc becomes covered with zinc-oxide. Iron coated with zinc, and lying in sea water, or even in some fresh waters, gets also soon covered with carbonate of lime, which stops the protection, and enables marine animals and plants to attach themselves. Mr. Mallett thus patented, in 1841, a counteracting process, by which the iron, after having been thoroughly cleansed, is immersed in a series of preparing bath, and finally in an alloy consisting of zinc, mercury, and a very small proportion of potassium or sodium.

The third and most general means for preserving iron from rust, is coating the surface with some kind of protective layer. The commonest coatings in use are paints, pitch, tar, oil, and grease, and in some of these cases the iron is either hot at the time of application, or is else heated afterwards. But paint containing red lead must be carefully eschewed, as it directly accelerates rusting, by imparting to the iron its own oxygen, and thus changing, according to Jouvin, in course of time actually into metallic lead. Asphalte alone, or shellac dissolved in methylated or wood spirit, insoluble soaps, and solutions of India-rubber, are occasionally employed. Vogel suggests a coating of white wax dissolved in benzine, the latter evaporating and leaving a thin skin of wax. M. Thiebault, of St. Etienne, recommends a covering of black oxide, which is produced by rust formed artificially on the surface,—the iron being then plunged into nearly boiling water. This process having been repeated several times, the exterior is covered with a weak solution of sulphate of potash, and rubbed over with olive oil. By this process the rust loses its affinity for oxygen, and does not form a voltaic pile with the iron. Some of the patents taken out in England for giving the iron a protective coating are worth notice. In 1849, Mr. Paris patented a process, according to which a solution of gum was spread over the cleansed surface of the iron, powdered glass being strewn upon it, and then fused In 1856, Mr. Reid, a mineralogist, took out a patent for what he called a sure method. As far as simplicity and cheapness are concerned, it would seem to leave nothing to be desired. The iron is first placed in a furnace and covered with soot. The temperature is then raised to red or white heat, and the iron having been cooled down and cleaned, and a coat impervious to rust is said to be formed. In the same year Mr. Atkinson patented the depositing of brass or copper on iron, a process said to be successfully carried out at Portsmouth by Mr. Wielan on armour-plates. In 1858, Messrs. Bouchard and Clavel, Paris bankers, patented a paint chiefly containing an ochre found on an estate in the department de l'Yonne. This peculiar kind of ochre, called Burgundy red, is said to possess some excellent qualities, and to be also an exceedingly good preservative against rust.

There are still some rust-preventing substances which cannot well be included amongst the coatings—alkalies, for instance. Iron may be safely kept in lime-water, or water containing either carbonate of soda or potash. Payen gives as a reason that the contact with them renders the iron electro-negative. For protecting iron kitchen utensils when out of use, a paste of soda, roasted starch and water, would be much better than grease, which turns rancid, and then quickly leads to the formation of rust. The presence of slaked lime, and especially chloride of lime, in the neighbourhood of polished steel is also very effective in preserving it from corrosion, as both these earths have a strong affinity for carbonic acid and water. Herr Krupp's cases of steel in the last great Exhibition were provided with pieces of chloride of lime placed in a saucer, and it was remarkable in how bright a state the fractured surfaces were kept by this means. Charcoal powder is much more useful than sawdust for packing up iron-ware, as wood in a minute state of subdivision has its hygroscopic properties, or affinity for moisture, greatly increased.—*Mechanics' Magazine.*

NEW WHEAL MARTHA MINING COMPANY.

The following report on this mine, by Capt. J. Pearce (of South Caradon), dated Oct. 6, has been forwarded to Messrs. Webb, Geach, and Pennington:—

I find the engine-shaft is sunk to the 86, where they have commenced cross-cutting the lode. Owing to the quantity of water issuing from it they are obliged to drive a short distance west before cutting through the south part of the lode, which, judging from the present indications, will be found more productive than the northern part. The portion already cut through is composed of peach, capel, mundic, and some stones of ore of a rich quality and promising character. The 74 is driven west of the shaft about 25 fms., 10 fms. of which have laid open ground that may be worked at a profit, either by stoping or tribute. This is not rich at present, but, from its character, an improvement may soon be reasonably expected. The eastern end of this level has also a promising appearance, producing good stones of ore. The 64 is extended as far west as the No. 2 winze, which has been sunk from the level above the 52. The northern part of the lode, in this level, has been driven on for some distance, and a winze having been sunk upon the south part of the lode, in the 52, a short cross-cut is being driven to communicate this winze with the level driving on the northern part of the lode in the 64, which they expect to hole every day. When this is accomplished a large piece of ground will be laid open for stoping to great advantage, the large course of ore driven through in the 52 having dipped west towards the cross-course. The 52 has been driven for some distance east of No. 2 winze. In the bottom of this level there are two stopes working—one east and the other west of No. 1 winze, yielding on an average from 10 to 11 tons of ore per fm. The 40 is driven about 55 fms. west of the shaft; here they are expecting to cut the cross-course in a short distance of driving. The end is not particularly rich, but has stones of ore. When through the cross-course a great improvement may be expected, as a good lode has been driven through for more than 20 fms. in the 20 fm. level. In the 20, which has been extended about 25 fms. west of the shaft, the lode is 2½ ft. wide, yielding about 4 tons of ore per fm., with every appearance of speedy improvement. The shoot of ore in this level, west of the cross-course, has been driven through for more than 20 fms. A winze is being sunk in the bottom of this level, down about 2½ fms.; here the lode is productive, yielding from 7 to 8 tons of ore per fathom, and improving in value as they sink. There are about 30 men working upon tribute, at an average of 7s. 6d. in 1*l.*, and are getting fair wages at that price. From closely observing the quantity of ore discovered, the comparatively small cost with which it can be taken away, and the returns made monthly, I find that the reserves of this mine are increasing, and that by the end of the present year they will be enabled to send 350 tons per month into the market. Taking into consideration the various features of this mine, its present appearances, resources, and future prospects, I feel justified in coming to the conclusion that the New Wheal Martha is more than an ordinary speculation.

TREATING PEAT AND TURF.—Mr. Charles Fleury, of Brussels, has patented an invention, according to which he treats the peat with carbonated calcined potash, with or without water or steam, by which he decomposes and dislodges the mineral substances and woody fibre. The decomposed and undecomposed parts are both converted into heavy fuel. The pulp is compressed, and dried as usual.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending October 9 was 11,432*l.* 4s. 10d.

ATLANTIC AND GREAT WESTERN RAILWAY COMPANY.

OFFICES,—2, OLD BROAD STREET, LONDON, E.C.

ISSUE OF SECOND MORTGAGE BONDS (OHIO DIVISION).

PAYABLE IN LONDON.

$4,000,000. Due in 1883. Coupons due 1st January and 1st July.

Secured by a registered mortgage on the income and all corporate rights, privileges, lands, franchises, plant, and property of the Ohio division of the railway.

The bonds are redeemable at par in New York, or in London at 4s. 6d. per dollar, and are transferable without stamp or endorsement.

Interest coupons are attached to the bonds, payable semi-annually, at the Consolidated Bank in London, at the fixed rate of 4s. to the dollar.

The bonds will be issued at 66, at which rate bonds of $1000 will cost £148 10s., carrying coupons due January 1, 1865.

The coupons represent £14 per annum on each bond of $1000, or 9¼ per cent. interest on price of issue.

The immense development of the Western States of America, without any increase in the means of transit to the eastern ports, has given the Atlantic and Great Western Railway, as rapidly as the different sections have been opened, an unexampled success. The whole line is now fully ready for business and thoroughly ballasted, but the demand for rolling stock has been so far in excess of anticipation that adequate provision for it has not been made, and 200 miles of the main line has remained shut up till now. Great efforts have been made to supply locomotives, carriages, and trucks. The company has built extensive works for their construction, and are now turning out one locomotive complete every four days, and ten freight cars every day. In this way the demand will, in reasonable time, be supplied.

As the entire through traffic to and from New York will pass over the Erie Railway, it is but reasonable that that company, which will so largely benefit, should furnish a portion of the rolling stock, and to meet this a treaty has been made with the Erie directors for the expenditure of $5,000,000 in the construction of engines and cars. The entire amount is now under contract for rapid delivery, and as received will be used exclusively for the through traffic over the Atlantic and Great Western Railroad, the latter company on its part agreeing to supply a similar quantity for the same purpose.

Following the financial policy adopted at the outset, of issuing securities to the public only after so much of the line was finished as would secure the necessary income for providing the interest, the company feel justified, now that the building of this great railway is completed, in making this additional issue of bonds.

During the last ten years no railroad of any magnitude has been built on the American continent, except the Atlantic and Great Western, in which period the population and all produce, agricultural and mineral, have largely increased; hence results the prosperous state of most of the railroads, whose nett receipts have enabled large dividends to be paid to the stockholders, after providing interest on indebtedness, thus:—

The Cleveland, Columbus, and Cincinnatti Railway divided last year	15 per cent.
Cincinnatti, Hamilton, and Dayton	10 „
Little Miami	30 „
Michigan Central	18 „
Lake Shore, Cleveland, Painsville, and Ashtabula	23 „

And it cannot be doubted that the Atlantic and Great Western, possessing almost a monopoly of the petroleum traffic, and passing over the extensive coal fields of Ohio, which are of greater extent than even the large fields of Pennsylvania, will show results at least equal, and most probably exceeding some of those above named.

The whole system of this railway, when in operation, will consist of—

The Main Line—Salamanca to Dayton	385 miles.
Branch to Cleveland	67 „
Franklin Branch and Buffalo Extension	80 „
Total	532 miles.

Of this 322 miles have been successfully worked during the summer, for the last three months the earnings having exceeded $1,000,000. Estimating the receipts on the entire line to be only as great in proportion (and unquestionably they will be considerably larger) there would accrue—

A gross receipt of	$6,747,416
Deducting 50 per cent. working expenses	3,373,708
Leaving nett gain	$3,373,708
Interest on total bonded debt, including present issue..	$966,560
Rent of leased lines	300,000=1,266,560
Leaving surplus	$2,107,418

This, under ordinary circumstances, would be applicable to dividend on stock, but for the amount required to pay interest on bonds ($717,860 being payable in London, at the fixed rate of 4s. per dollar, and the rate of exchange at present ruling exceptionally high) a portion of the above surplus would be absorbed in the premium for gold.

It is thus evident that the resources of the road will be far more than equal to meet the charge for interest, even should the rate of exchange rule much higher than at present.

The several divisions of the Atlantic and Great Western Railway have been consolidated under the government of James Robb, Esq., whose reputation as a banker and railway administrator is established in Europe as well as in America. Mr. Robb, as President of the Atlantic and Great Western Railway, joins the direction of the Erie and other lines forming the through route between New York and St. Louis, so as to secure unity of action.

The price of issue has been fixed at 66. The terms of issue are as follows:—

5	per cent.	on application, being	£11	5	0	per bond of $1000.
10	„	on allotment	„ 22	10	0	„ „
15	„	19th November	„ 33	15	0	„ „
15	„	19th December	„ 33	15	0	„ „
21	„	19th January	„ 47	5	0	less £7 coupon due 1st January.
Total			£148	10	0	

Subscribers have the option of paying the instalments in advance, and will be allowed a discount of 9 per cent. per annum on such pre-payments.

After allotment scrip certificates will be issued to "bearer." These certificates will be exchanged for bonds to "bearer" on payment of the final instalment.

Forms of application may be obtained at the Consolidated Bank; or at the offices of the company, No. 2, Old Broad-street, London, E.C.; or of Mr. E. F. SATTERTHWAITE, broker, 88, Throgmorton-street, London, E.C.—London, October 12, 1864.

FORM OF APPLICATION.

To be forwarded to the offices of the company, No. 2, Old Broad-street, London, E.C., after payment of the preliminary deposit to the bankers.

To the Atlantic and Great Western Railway Company.

Having paid to the Consolidated Bank (Limited) the sum of £ , I hereby request that you will allot me $ Second Mortgage Bonds of the Atlantic and Great Western Railway (Ohio Division), and I hereby agree to accept such bonds, or any less number that may be allotted to me. I am, your obedient servant,

Signature .....

Address in full.....

Date .....

MINING OFFICES, MANCHESTER.

MESSRS. HARVEY AND CO., MINING ENGINEERS, AGENTS, AND SHAREDEALERS, CLARENCE CHAMBERS, MANCHESTER, are at all times in a position to deal in all the market Dividend and Progressive Mine shares, and also to advise on all mining matters, being practically acquainted with the business, and having a daily communication from the mining districts of Devon and Cornwall.

Messrs. HARVEY and Co. publish a monthly "Mining Circular," containing a valuable summary of mining information. Forwarded gratis on application.

The Circular for October contains a report on East Seton, Wh. Prosper, and Margaret.

MR. BRENTON SYMONS INSPECTS and REPORTS on ANY MINERAL PROPERTY. In all cases where procurable a plan will accompany his report.—18, Hatton-garden, E.C.

MR. BRENTON SYMONS is now engaged in PREPARING a GEOLOGICAL MAP and SECTION of the MINERA COAL FIELD and LEAD MINING DISTRICT, for publication by subscription. Whilst there he OFFERS HIS SERVICES to INSPECT and REPORT on ANY MINING PROPERTY in the neighbourhood.—Address, Minera Lead Mines, Wrexham.

BRITISH AND FOREIGN INVESTMENT.—Mr. THOMAS SPARGO, STOCK, SHARE, AND MINING BROKER, 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION of BUSINESS in the PURCHASE and SALE of SHARES in BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, and ALL OTHER DESCRIPTIONS of BRITISH and FOREIGN STOCK.

Mr. SPARGO has for sale shares in English mines paying from 10 to 20 per cent. upon the present price, in bi-monthly and quarterly dividends, as also a number of shares in good progressive mines, some of which he with confidence specially recommends to the public as sound investments.

Mr. SPARGO gives every information as to position and prospects of all mining undertakings, upon application, either personally or by letter, and is enabled, through his long experience, aided by his monthly visits to Cornwall, Devon, and Wales, to obtain the most reliable information as to the numerous mines in those districts. He will, at all times give the best advice as to investment in mines, and, if necessary, inspect them himself; as in all cases he wishes to be guided by the intrinsic value of the property. Upon the receipt of 5s. he will furnish a selected list of dividend and progressive companies.

Mr. SPARGO has published the following works, viz.:—

Statistics and Observations upon the Mines of Cornwall,	1859,	price 2s. 6d.
Ditto	ditto	1860, price 2s. 6d.
Ditto	ditto	1862, price 5s.
Ditto	ditto	1864, price 5s.

Physical, Geological, and Parish Map of Cornwall. Scale, three miles to an inch. Printed in three colours, showing distinctly the mining districts, the height of the hills, &c. Price 10s. 6d., on cloth and rollers.

Geological maps of the various mining districts, showing the boundary line of each mine, with the lodes, cross-courses, and elvan courses by which it is traversed. Price 2s. 6d. each.

A Model, or Relief, map of Cornwall (6 ft. 6 in. by 5 ft.), presenting the names of every town and village, as also every characteristic point of the county. Price £5 5s.

Dividends received, calls paid, and all orders promply negociated.

Commission 1¼ per cent.

Mr. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.

Bankers: Bank of London, and the Metropolitan and Provincial Bank (Limited).

MESSRS. ROBERTS AND CO., 87, LONDON WALL, E.C., have selected a LIST of DIVIDEND and PROGRESSIVE MINES, which they can strongly recommend. Also, Bank, Railway, and other shares.

Commission, 1¼ per cent.

Office of ROBERTS and Co.'s "Price List, and Stock and Share Reporter," price 3d.

MESSRS. ROBERTS AND CO.'S PRICE LIST AND STOCK AND SHARE REPORTER contains Reports of Mines, Notices of Meetings, Plans of Mining Districts (showing the position of progressive mines in reference to those returning large profits), Railway Meetings, Joint-Stock Companies Intelligence, and Advice as to the Purchase and Sale of Stock.—87, London-wall, E.C.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH HALLENBEAGLE TIN AND COPPER MINING COMPANY (LIMITED).—TO BE SOLD, BY AUCTION, at the NORTH HALLENBEAGLE TIN AND COPPER MINE, situate in the parish of St. Agnes, in the county of Cornwall, by the direction of the liquidator of the said company, with the sanction of the Court, on Tuesday, the 25th day of October inst., at Eleven o'clock in the forenoon, subject to such conditions as will be then and there produced, either together or in lots, the MINE SETTS or GRANTS of the said company, and the undermentioned MINING MACHINERY and MATERIALS, viz.:—

ONE 45 in. cylinder PUMPING ENGINE, 8 ft. stroke, equal beam, with first piece of main rod and BOILER, about 13 tons, complete.

Balance-bob and connecting rod; shears, with pulleys and brasses; 8 arm capstan, with span beam, &c.; capstan rope, about 22 cwts.; 2 horse whims, shaft tackle and pulleys, wire-rope, hemp whim rope, underground gig, about 8 cwts. of new iron, 36 in. bellows, anvil, vice, and other smiths' tools, saw-pit timber, carpenters' bench and timber in saw-house, grindstone and frame, wood house for carpenters' shop, and material house, wood house on the dressing-floors, wood picking shed, wooden launders and stands, ore dressing materials, scales, beams, stand, and a quantity of other articles in general use in mines; and also account-house furniture.

UNDERGROUND.

House water lift; 30 fms. of 6 in. lift, 6 tons; 6 in. plunger pole; stuffing box and gland, about 6 cwts.; pole case, 6 cwts.; H and bottom doorpiece, 15 cwts.; 20 12 in. pumps diameter, 12 tons; 3 12 in. pumps diameter, 2 tons; 11 in. plunger pole, 10¼ ft. long; pole case, 13 cwts.; H piece, 15 cwts.; cut doorpiece, 15 cwts.; cistern windbore, 10 cwts.; 11 in. working barrel, 7 cwts.; doorpiece, 12 cwts.; windbore, 8 cwts.; bottom lift; 11 in. doorpiece, 15 cwts.; working barrel, 16 cwts.; sinking windbore, 16 cwts.; 4 buckets and prongs; 40 fms. 11 in. main rods in shaft; 8 hammered strapping plates, 32 cwts.; 8 rolled ditto, 24 cwts.; flange and rod bolts, 15 cwts.; staples and glands, 20 cwts.; 2 spare pulleys, 15 cwts.; 3 wood cisterns and cistern bearers; 20 fms. of bucket rods; clasp joints, &c., 10 cwts.

The mine and materials may be inspected at any time prior to the sale, on application to the person in charge thereof; and further particulars, with conditions of sale, may be obtained of Mr. JOHN BINGLEY, of Leeds, engineer, the liquidator of the said company; and of JOHN BLACKBURN, Leeds, the solicitor to the liquidator; or of JOSEPH ROBERTS, solicitor, Truro, his agent.

Dated Registrar's Office, Truro, October 5, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WEST CRINNIS COPPER MINING COMPANY.—The Registrar of this Court has appointed the 24 day of November next, at the Registrar's office, at Truro, to SETTLE the LIST of CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made out and deposited at the said office.

WILLIAM MICHELL, Registrar of the said Court.

Dated this 12th day of October, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Devon.

IN the MATTER of the COMPANIES ACT, 1862, and of the DUKE MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's Office, Truro, on or before the 25th day of October, 1864, or in default thereof they will be excluded from the benefit of any distribution made before such proof.

And for the purpose of such proof they are either to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the Court at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.

W. MICHELL,

Registrar of the above-named Court, Truro, Cornwall.

Dated this 12th day of October, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the PENHAUGER MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 26th day of October inst., to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to William Michell, the Registrar of the said Court, at Truro.

WILLIAM MICHELL,

Registrar of the above-named Court.

Dated Registrar's Office, Truro, October 12, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH WHEAL VOR MINING COMPANY.—The Registrar of this Court has appointed the 28th day of October inst., at the Registrar's Office, at Truro, to SETTLE the LIST of CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made out and deposited at the said office.

WILLIAM MICHELL, Registrar of the said Court.

Dated this 12th day of October, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WENDRON UNITED MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS, at the Registrar's Office, Truro, on Monday, the 24th day of October instant, or in default thereof they will be excluded from the benefit of any distribution made before such proof.

And for the purpose of such proof they are either to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the Court at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.

WILLIAM MICHELL,

Registrar of the above-named Court, Truro, Cornwall.

Dated 13th October, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN RE WHEAL MARGERY MINE.

TO BE SOLD, pursuant to an Order made in a Cause Higgs v. Lowther and Another, dated the 21st day of September last, at the Registrar's office, Truro, on Wednesday, the 26th day of Oct. inst., at One o'clock in the afternoon,

1 (960th) PART or SHARE of the defendant Samuel Lowther; and

2 (960ths) PARTS or SHARES of the defendant Richard Greenwood,

Of and in the said MINE. HENRY SEWELL STOKES, Solicitor, Truro

(Agent for R. H. Bamfield, Plaintiff's Solicitor, St. Ives).

Dated Registrar's Office, Truro, October 12, 1864.

VALUABLE COPPER AND TIN MINES FOR SALE.

MR. GEORGE SEALY has received instructions to OFFER FOR SALE, BY AUCTION, on Tuesday, October 25, at One o'clock in the afternoon, at the account-house, on the mines, the VALUABLE SETTS and MACHINERY of the CHARLOTTE UNITED MINES, in the parish of PERRANUTHNOE.

The sett is extensive, held under favourable conditions, and has been already largely developed.

The machinery is complete, in excellent order, and comprises the following:—60 in. PUMPING ENGINE, 11 ft. stroke in shaft, and 12 in. cylinder, with FOUR BOILERS; 80 fms. 16 in. and 20 fms. 13 in. pumps; 18 in. steam whim, with crusher attached.

For further particulars, apply to the Auctioneer; to the Agents, on the mines; or to Mr. T. P. TYACK, Helston.—Marazion, October 11, 1864.

IRON.—TO BE GRANTED, for a term of 21 years, the RIGHT to WORK a very EXTENSIVE MINE of RICH HEMATITE IRON ORE, situate in the parish of SHAUGH PRIOR, on the south coast of Devon, about six miles from a wharf belonging to the proprietors, where the ores can be shipped free of dues, and at all seasons of the year.

The South Devon and Tavistock Railway passes within a very short distance of the mine, and is in direct communication with the wharf, thereby affording facilities for running the trucks alongside of the vessels.

For further particulars, and to treat for a sett, application to be made to Mr. C. L. RADCLIFFE, solicitor, Plymouth.

AYRSHIRE.

MINERALS.—TO BE LET, for 30 years, the very superior HEMATITE IRON ORE, BLACKBAND, and CLAYBAND IRONSTONE, COAL, LIMESTONE, FREESTONE, FIRE-CLAY, SAND, and COMMON CLAY, under and within the LANDS of GARPEL, WHITEHAUGH, LIMMERHAUGH, and CHAPELHOUSE, extending to 4800 acres imperial measure, parts of the ESTATE of CRAIGENGILLAN, situated in the parishes of MUIRKIRK and SORN, and shire of AYR. The projected line of railway from Ayr to Douglas has been laid off through the farm of Limmerhaugh.

For further particulars, application may be made to Mr. ALEX. SMITH, W.S., 18, York-place, Edinburgh, where specimens of the hematite may be seen.

Mr. G. Gemmell, tenant in Garpel, will point out the mineral field.

AYRSHIRE.

MINERALS.—TO BE LET, for such number of years as may be agreed on, the COAL under and within the LANDS of UPPER-BEOCH extending to 600 acres imperial measure, or thereby, being part of the ESTATE of CRAIGENGILLAN, lying in the parish of NEW CUMNOCK, in the county of AYR.

This field comprises the well-known Aldnaw Smithy Coal, and is situated within four miles of the railway station at Dalmellington.

For further particulars, application may be made to Mr. ALEX. SMITH, W.S., 18, York-place, Edinburgh; or to Mr. KENNEDY SMITH, Berbeth Mains, Dalmellington.

FOR SALE, the RIGHT to the PATENT of a VALUABLE IMPROVEMENT in VALVES and BUCKETS for PUMPS, and in VALVES or COCKS for OTHER USES.—For particulars, apply to Mr. W. T. RAWLE, patent and mining agent, 39, Budge-street, Bristol.

MERIONETHSHIRE, NORTH WALES.

TO BE DISPOSED OF, a SLATE QUARRY PROPERTY, vein proved, and position commanding all advantages. Also, a VALUABLE GRANT, possessing a RICH SILVER-LEAD MINE, with other lodes, very favourable.—To treat for the same, apply to Mr. H. P. M. OWEN, C.E., Penrhyndeudraeth, via Carnarvon.

Mr. OWEN has OTHER MINES and QUARRIES TO DISPOSE OF. Also, begs to offer his services to gentlemen in all inspections of native mineral, with practical reports thereon. Immediate attention given.

TO QUARRY PROPRIETORS AND CAPITALISTS.—TO BE LET OR SOLD, a capital prospect for a FLAG and SLATE QUARRY of the best blue stones. The vein is 100 yards wide, crossing the Newtown and Mashynlleth (Montgomeryshire) Railway. Plenty of water at all times close by to drive any machinery necessary. The turnpike-road is on the other side of the river. A level is driven into the rock 20 yards, improving as it goes down. The blocks deepen one yard in three. Owen Hughes, late manager, Llechwed Quarry.—Apply to Mr. JOHN JONES, Coedyrhyd, Commins Coch, via Salop.

TO IRONMASTERS.—The COEDCAE COAL COMPANY are PREPARED to DISPOSE of TWO HUNDRED TONS DAILY of their celebrated No. 3 RHONDDA COALS. They are pure, and eminently suitable for all iron making, raw or in coke.—Post-office Chambers, Docks, Cardiff.

TIN-PLATES—AGENCY for the SALE of WANTED, by a FIRST-CLASS HOUSE in the MIDLAND DISTRICT.—Address, "Tin-plates," MINING JOURNAL office, 26, Fleet-street, London, E.C.

COPPER MINE TO BE LET.—A COPPER LODE having been DISCOVERED on the LANDS of BALLYKNOCK, about two miles from Taghmon, in the county of Wexford, a CONTRACT will be MADE with a COMPETENT CAPITALIST or COMPANY who might be DISPOSED to TAKE a LEASE of the same, and commence to work at once.

The shaft is 84 ft. deep, it is sunk through the lode, which is very large, and the joints thereof when broken are strongly marked with sulphur and particles of copper, and in the opinion of several experienced miners who have viewed the place it is of a very promising appearance; the copper, also, in their estimation, is of a very prime quality, and the concern is altogether well worthy the attention of parties anxious to engage in such operations.

All further particulars may be known by application to CHARLES D. INGHAM, Esq., 37, Usher's Quay, Dublin; or to MICHAEL MACNAMARA, Esq., 5, Lower Dominick-street, Dublin.

FOR SALE, on reasonable terms, a FREE MINER'S RIGHT in an EXTENSIVE CALCAREOUS HEMATITE IRON ORE GALE, in the FOREST of DEAN. The ore can be reached at a moderate depth from the surface, and the gale ajoins the route of the Worcester Dean Forest and Monmouth Railway.—For further particulars, and to treat, apply to Mr. T. FORSTER BROWN, mining engineer, Machen, Newport, Monmouthshire.

WIRE ROPES FOR SALE, BY PRIVATE CONTRACT.—ONE WIRE ROPE, 196 fms. long; EIGHT ditto, each 183 fms. long; and TWO ditto, each 116 fms. long; all 4¾ in. circumference, weighing 22 lbs. per fm., and made of the best charcoal iron wire, by Messrs. Glass, Elliott, and Co.—Applications to be addressed Messrs. COCHRANE, GROVE, and Co., Clifton Suspension Bridge Works, Bristol, where every information can be obtained.

HORIZONTAL ENGINES FOR SALE, at very low prices:—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders ,24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAGE and Co., Laurence Pountney-place Laurence Pountney-hill Cannon-street E.C.

FOR SALE, a NEW COMBINED DOUBLE CYLINDER CONDENSING BEAM ENGINE. Diameter of cylinder, 21¼ and 14¼ in.; length of stroke, 48 in.; with TWO BOILERS.—Apply to Messrs. WM. BIRD and Co., 2, Laurence Pountney-hill, London.

FOR SALE, 19½ in. FORCING PUMP, 14 in. LIFTING PUMP, HAND PUMPS, pumping crank, lifting screw, pit chain, and other colliery material.—Apply to Mr. JOHN FARLER, Nailsea, near Bristol.

BEST CRYSTALLISED MANGANESE SPIEGEL IRON, AND ALL OTHER KINDS OF GERMAN NATURAL STEEL IRON,

Produced out of the best sparry iron ores, for steel manufacturing works, as well as for puddling, forge, and foundry, ironworks, to refine common iron, delivered to all ports of Great Britain, and all information given by RUDOLPH BEUTEFUEHR, Iron Merchant and Mining Agent, SIEGEN (Rhenish Prussia).

P.S.—Railway trains to and from the Rhine, via station Deutz (opposite Cologne).

SWANSEA COPPER ORE WHARVES, TO IMPORTERS OF FOREIGN COPPER, LEAD, AND CALAMINE ORE.

Swansea, July 1, 1864.

GENTLEMEN,—We beg to inform you that, in consequence of the retirement of Messrs. W. and J. M. Williams from the copper ore trade, which they have carried on here for so many years past, we have resolved to enter upon that business, and for which purpose we have secured most eligible wharves, on the west side of the North Float, where vessels drawing 20 ft. of water can get alongside at all times. These wharves are now covered in, the floors being made of concrete to prevent waste of the ore. A powerful steam crusher has lately been erected on the premises, and is now in working order.

The business we purpose carrying on is that of COPPER ORE WHARFINGERS, combined with metal and other general agencies, which will be managed by our Mr. Thomas Elford, who for 20 years has filled an important situation under Messrs. Williams, Foster, and Co., and for the last eight years has had the entire management of their large copper smelting works, and copper and metal rolling mills, in this locality, as well as the copper ore business of Messrs. W. and J. M. Williams, which we trust will be a sufficient guarantee to our friends that any business they may entrust to our care will be conducted with the most scrupulous attention to secure the best results for their interests.

In consequence of the large number of very extensive Copper smelting works concentrated in this immediate locality, this market affords greater competition for ore than perhaps any other in the world, there being now no less than sixteen distinct Companies competing for ores sold at the public ticketing, every two or three weeks. There is also a good demand for lead and zinc, or calamine ores, several large lead and spelter works having been established in this district for some time past, and new ones are in course of erection.

Soliciting a share of your consignments of ore, regulus, and slab copper to this port, as well as a share of any general business you may have to transact in this quarter,

We remain, Gentlemen, your obedient servants,

ELFORD, WILLIAMS, AND CO.

REFERENCES:—Messrs. Williams, Foster, and Co., London and Liverpool; Messrs. Williams, Harvey, and Co., London and Liverpool; the Glamorganshire Banking Company, Swansea; Messrs. Alex. Bell and Sons, No. 8, Finch-lane, London; Mons. Armand de Lacombe, Madrid.

TO INVENTORS AND PATENTEES.—A GENTLEMAN having an extensive connection with manufacturers, merchants, and others, would be GLAD to UNDERTAKE the SALE of INVENTIONS or PATENTED ARTICLES, on commission.—Apply to Mr. RAWLE, patent office, 14, Clare-street, Bristol.

N.B.—Continental and foreign agencies solicited.

ISAAC FRANCIS, NANT, WREXHAM, a dresser of 30 years' experience, is OPEN to INSPECT ANY DRESSING PLACE on moderate terms. Mr. FRANCIS can introduce PLANS of IMPROVEMENTS that will SAVE THIRTY PER CENT. COST in certain departments of any dressing floors.

JOHN CALDECOTT, PUBLIC ACCOUNTANT AND AUDITOR (Author of a "Practical Guide to Account Keeping) is PREPARED to ATTEND PUBLIC COMPANIES or PRIVATE PARTNERSHIP FIRMS ENGAGED in MINING or MANUFACTURING, to OPEN, POST, and BALANCE sets of ACCOUNTS, or to AUDIT, INVESTIGATE, or INTRODUCE HIS SYSTEM of CHECK and RESULTS with debit and credit balance account, demonstrated to be correct.—Office, No. 19, Pepper-street, Chester.

CAPT. C. WILLIAMS, TYN-Y-WERN, TALIESIN, via SHREWSBURY, has had upwards of 20 years' practical experience in mining, during which time he had the entire management of several English and Welsh mines. Residing in the centre of the CARDIGANSHIRE MINING DISTRICT, and in close proximity to those of MERIONETHSHIRE and MONTGOMERYSHIRE, he OFFERS HIS SERVICES to SURVEY and REPORT UPON ANY MINE.

MR. GEORGE HENWOOD, MINING ENGINEER, LOCHHEAD HOUSE, LOCHWINNOCH, SCOTLAND, OFFERS his SERVICES and ADVICE on mines situated in any part of England, Scotland, Wales, Ireland, Isle of Man, &c. Mr. Henwood's extensive experience in his peculiar department of mining science is well known, and will be exerted to the utmost for the benefit of his clients.

NEW COMBINED TURBINE, WINDING, AND PUMPING MACHINERY, MANUFACTURED by GEORGE LOW, MILLGATE IRONWORKS, NEWARK-UPON-TRENT,

Who respectfully begs to bring the above to the notice of the mining public, as an exceedingly cheap and easy method of applying water-power for the above purposes.

The TURBINE, WINDING, and PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 33 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary.

G. Low begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes.

MANUFACTURER of WINDING, PUMPING, CRUSHING, STAMPING MACHINERY, WINDING ENGINES, WATER WHEELS.

IMPROVED TURBINE WATER WHEELS CONSTRUCTED either to WORK VERTICALLY or HORIZONTALLY, and upon the MOST SCIENTIFIC and EFFECTIVE PRINCIPLE.

G. Low begs to recommend a special class of turbine adapted for extreme high falls (200 to 500 ft.), and consuming small quantity of water. This turbine will work with equal advantage without running at an excessive velocity. Also,

MANUFACTURER of IMPROVED BORING MACHINES for DRIVING ADITS.

Now ready, price 2s. 6d., by post 32 penny stamps,

MR. HOPTON'S NEW WORK, entitled CONVERSATIONS ON MINES, &c., BETWEEN "A FATHER AND SON." Thirteen plans on ventilation and working out coal, dialling, planning, and taking the dip and rise of the mine illustrated.

Near 900 copies are ordered in Wigan alone.

Address Mr. J. J. CAMPBELL, Cropper's-hill, St. Helen's; or the author, 73, Peter-street, St. Helen's.

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last paid.
1200	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—		10 8 0	0 15 0	April, 1864
4000	Bedford United (copper), Tavistock†	2 6 8	—		13 9 0	0 2 6	July, 1864
1248	Boscaswell (tin, copper), St. Just	6 15 0	—		1 5 0	0 5 0	May, 1864
200	Botallack (tin, copper), St. Just	91 5 0	—		477 15 0	2 0 0	May, 1864
5000	Bronfloyd (lead), Cardigan [L. £3]	2 7 6	—		0 19 0	0 2 6	April, 1864
916	Cargoll (silver-lead), Newlyn	15 5 7	40		8 10 0	0 15 0	Aug. 1864
1800	Carn Brea (copper, tin), Illogan	15 0 0	55		280 10 0	2 0 0	June, 1864
2900	Clifford Amalgamated (cop.), Gwen.	30 0 0	31	30 31	32 8 6	0 10 0	Aug. 1864
12000	Copper Miners of England	25 0 0	—		7½ per cent.		Half-yrly.
40000	Ditto ditto (stock)	100 0 0	—		1 per cent.		Half-yrly.
867	Cwm Erfin (lead) Cardiganshire [L.]	7 10 0	—		12 18 0	0 15 0	Oct. 1864
128	Cwmystwith (lead), Cardiganshire*	60 0 0	—		271 10 0	4 0 0	Sept. 1864
280	Derwent Mines (sil.-lead), Durham	300 0 0	—		182 0 0	5 0 0	June, 1864
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	600		933 0 0	10 0 0	Sept. 1864
358	Dolcoath (copper, tin), Camborne*	128 17 6	—	500	775 10 0	6 0 0	Oct. 1864
12800	Drake Walls (tin, copper), Calstock	2 1 0	—		0 18 0	0 1 6	May, 1863
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	62½	60 62	125 0 0	2 0 0	Sept. 1864
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	28	25½ 26½	12 2 0	0 17 0	Oct. 1864
300	East Darren (lead), Cardiganshire*	32 0 0	—		101 10 0	2 0 0	Oct. 1864
128	East Pool (tin, copper), Pool, Illogan	24 5 0	—		369 10 0	4 0 0	June, 1864
5000	East Rosewarne (cop., tin), Gwinear	2 15 0	3		0 2 6	0 2 6	Sept. 1864
1906	East Wheal Lovell (tin), Wendron	2 13 6	8	8½ 9	1 10 0	0 10 0	May, 1864
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—		64 0 0	1 0 0	June, 1864
5000	Frank Mills (lead), Christow	3 18 6	—		1 9 6	0 5 0	Aug. 1864
12800	Great Laxey (lead), Isle of Man [L.]	4 0 0	15½	15 16	1 1 0	0 10 0	Sept. 1864
1798	Great Wheal Fortune (tin), Breage	18 6 0	9		5 15 0	0 10 0	Nov. 1863
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	30	28 29	4 12 0	0 12 6	Sept. 1864
119	Great Work (tin), Germoe	100 0 0	—		15 0 0	5 0 0	Aug. 1864
1024	Herodsfoot (ld.), near Liskeard [S.E.]	8 10 0	38½	37 39	29 15 0	1 15 0	Oct. 1864
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	—		427 10 0	3 0 0	Oct. 1864
2000	Maes-y-Safn [L]	20 0 0	—		1 0 0	1 0 0	Oct. 1864
9000	Marke Valley (copper), Caradon	4 10 6	4½	4 4½	2 15 6	0 1 6	Oct. 1864
3000	Minera Boundary (lead), Wrexham [L.]	1 0 0	—		0 2 0	0 2 0	Aug. 1864
1800	Minera Mining Co. [L.], (ld.), Wrexham	25 0 0	—		155 18 0	10 0 0	Aug. 1864
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	27½	27½	16 19 7	0 12 3	Jan. 1864
40000	Mwyndy (iron ore) [L. £4] [S.E.]	2 10 0	—		0 4 0	0 2 0	April, 1864
250	Nanty Mines (lead), Montgomery	20 0 0	—		7 0 0	1 0 0	June, 1864
6000	New Birch Tor and Vitifer Cons. (tin).	1 6 6	2½	2 2½	0 9 6	0 1 6	July, 1864
5986	North Treskerby (copper), St. Agnes	1 9 0	3⅜	3 3½	0 13 0	0 2 6	Feb. 1864
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	—		86 19 0	0 2 6	Mar. 1863
200	Parys Mines (copper), Anglesey [L.]	50 0 0	—		112 10 0	10 0 0	July, 1864
1772	Polberro (tin), St. Agnes	15 0 0	—		7 19 6	0 10 0	Nov. 1863
512	Polbreen (tin), St. Agnes	8 0 0	—		1 0 0	1 0 0	July, 1863
1123	Providence (tin), Uny Lelant† [S.E.]	10 6 7	39	36 38	74 5 0	1 0 0	Aug. 1864
6000	Rosewall Hill and Ransom United	2 16 0	—		0 10 0	0 1 6	June, 1863
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	545		452 10 0	7 0 0	Sept. 1864
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0	—		74 10 0	1 0 0	May, 1863
496	S. Wh. Frances (cop.), Illogan* [S.E.]	18 18 9	—		370 13 6	1 0 0	Nov. 1863
4000	St. Day United (tin), Redruth	14 0 0	—		0 5 0	0 5 0	Mar. 1864
940	St. Ives Consols (tin), St. Ives	8 0 0	25		490 10 0	0 10 0	May, 1864
6000	Tincroft (cop. tin), Pool, Illogan [S.E.]	9 0 0	19	14½ 15½	15 11 0	0 10 0	Sept. 1864
4200	Vigra and Clogau (copper) [L. £5]	4 0 0	24		6 2 6	1 10 0	Mar. 1864
6000	West Basset (copper), Illogan [S.E.].	1 10 0	8½	8 8½	25 13 0	0 5 0	July, 1864
3000	W. Chiverton, (ld.), Perranzabuloe [S.E.]	—	60	55 60	3 0 0	0 15 0	Aug. 1864
256	West Damsel (copper), Gwennap	38 10 0	—		52 10 0	1 10 0	Sept. 1864
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	210	210 215	417 0 0	4 0 0	Oct. 1864
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	95	89 91	603 0 0	1 10 0	Oct. 1864
1000	Wheal Basset and Grylls (tin)	7 0 0	—	6 6½	3 0 0	0 10 0	Oct. 1863
512	Wheal Jane (silver-lead), Kea	3 10 0	—		15 0 0	0 10 0	Aug. 1864
4295	Wheal Kitty (tin), St. Agnes	5 4 6	—		1 18 6	0 5 0	Aug. 1864
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	2 0 6	—		10 2 6	0 7 6	July, 1864
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]	8 0 0	17	16 17	58 17 6	0 10 0	Sept. 1864
100	Wheal Mary (tin), Lelant	36 2 6	—		288 5 0	4 0 0	Mar. 1864
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—		343 3 0	5 0 0	May, 1864
396	Wheal Seton (tin, copper), Camborne	58 10 0	212½	202½ 207½	183 15 0	4 0 0	Oct. 1864
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0	20	19 20	50 5 0	0 12 6	Aug. 1864
2044	Wheal Tremayne (tin), Gwinear	6 11 3	—		6 1 3	0 5 0	Nov. 1863
7000	Wicklow (copper) [L.], Wicklow	2 10 0	14½		14 11 0	0 6 0	April, 1864

[* Dividends paid every two months. † Dividends paid every three months.]

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last paid.
240	Boscean (tin), St. Just	20 10 0	—		36 10 0	1 0 0	Mar. 1862
8000	Chiverton (lead), Perranzabuloe [S.E.]	6 0 0	6	5½ 6	—	—	—
256	Condurrow (cop., tin), Camborne	76 10 0	—		85 0 0	2 0 0	June, 1857
2450	Cook's Kitchen (copper), Illogan	17 15 9	14	13 15	1 7 0	0 7 0	May, 1862
1024	Copper Hill (copper), Redruth	12 0 0	—		2 7 6	—	Sept. 1862
1055	Craddock Moor (copper), St. Cleer	8 0 0	—		7 12 0	0 4 0	July, 1862
4076	Devon and Cornwall (cop.), Tavistock	6 6 3	—		0 10 0	0 2 6	Feb. 1859
3000	Dyfngwm (lead), Wales	12 6 6	—		0 17 6	0 2 6	Jan. 1863
940	Fowey Consols (copper), Tywardreath	4 0 0	—		41 9 3	0 2 6	June, 1860
6000	Great South Tolgus, Redruth	0 14 6	2½		7 18 6	0 5 0	Dec. 1861
10240	Gunnis Lake (Clitters' Adit)	0 2 0	—		0 3 0	0 1 6	Mar. 1862
160	Levant (copper, tin), St. Just	2 10 0	—		1091 0 0	5 0 0	May, 1860
640	Mount Pleasant (lead), Mold	4 0 0	—		18 18 1	0 7 6	Aug. 1862
5000	Orsedd (lead), Flintshire	0 0 8	—		0 10 4	0 0 8	Mar. 1862
6000	South Exmouth (lead), Christow	1 14 0	—		0 5 0	0 5 0	Dec. 1862
280	Spearne Moor (tin, copper), St. Just	32 17 9	—		9 15 0	1 0 0	June, 1862
572	Trelyon Consols (tin), St. Ives	14 0 0	—		7 0 0	0 10 0	Sept. 1860
1000	Trumpet Consols (tin), near Helston	11 10 0	—		11 0 0	2 0 0	Mar. 1862
12000	Twelve Apostles Amal. (ld.), Wrexham	1 0 0	—		—	—	—
1024	Wendron Consols (tin), Wendron	19 13 10	—		8 15 0	1 0 0	Jan. 1861
60	West Burton Gill (lead), Yorkshire	50 0 0	—		14 10 0	3 0 0	June, 1861
1024	West Caradon (cop.), Liskeard [S.E.]	7 0 0	7½	6 7	101 1 3	0 10 0	Oct. 1862
1024	Wheal Friendship (copper), Devon	20 0 0	—		295 10 0	5 0 0	Feb. 1861
896	Wheal Margaret (tin), Uny Lelant	10 17 6	8½		76 5 0	1 0 0	May, 1863
6400	West Fowey Consols (tin and copper).	7 10 0	—		0 19 0	0 3 0	May, 1862

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last paid.
20000	Australian (cop.), S. Australia [S.E.]	7 7 6	—		0 1 0	0 1 0	Dec. 1863
2464	Burra Burra (cop.), South Australia.	5 0 0	—		315 0 0	5 0 0	Mar. 1864
6000	Central American (silver) [L.]	5 0 0	—		4 6 8	0 14 10	Dec. 1863
15000	Cape Copper Mining [L. £10] [S.E.]	7 0 0	10½	9 10	0 15 0	0 5 0	Sept. 1864
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	28	26 28	100 0 0	0 8 0	July, 1864
100000	Don Pedro No. Del Rey [L. £1] [S.E.]	0 10 0	⅝		0 0 9	0 0 9	Dec. 1863
70000	English and Australian [S.E.]	5 0 0	—		1 12 0	0 2 0	Aug. 1864
15000	East Indian Coal, Calcutta [L.]	10 0 0	—		7½ per cent.		Yearly.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	3¾	3¼ 3¾	0 14 4	0 3 0	June, 1864
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	23	21 23	21 10 0	1 0 0	June, 1864
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	1⅛	⅞ 1⅛	0 12 0	0 1 0	June, 1864
15000	Linares (ld.), Pozo Ancho, Spain [S.E.]	3 0 0	6	5 6	10 1 2	0 5 0	Aug. 1864
10000	Lusitanian (of Portugal) [S.E.]	2 0 0	—		1 1 0	0 2 0	July, 1864
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	—		1 7 3	0 7 3	Jan. 1864
97500	Port Phillip (gold), Clunes [S.E.]	1 0 0	1⅛		0 12 6	0 1 0	July, 1864
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	38	35 37	63 15 0	2 10 0	June, 1864
43174	Unit. Mexican (sil.), Mexico [S.E.] Av.	28 5 0	—	4½ 5	2 19 0	0 5 0	Sept. 1864
10000	Vancouver (coal) [L. £10]	5 0 0	—		0 10 0	0 5 0	May, 1864
25000	Victoria (London) Mining Co. [L.]	1 0 0	—		0 1 9	0 1 9	Aug. 1864
20000	West Canada Mining Company [L.]	1 0 0	—		0 12 0	0 5 0	June, 1864
45000	Yudanamutana (cop.), S. A. [L.] [S.E.]	3 0 0	1⅞	1½ 1¾	0 5 0	0 5 0	Aug. 1863

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last paid.
10000	Alten and Quænangen Uni. (cop.) [L. £5]	4 10 0	—	2 2½	4 5 0	0 15 0	Nov. 1853
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	—		6 18 0	0 10 0	Nov. 1862
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	4 10 0	—		15 per cent.		May, 1859
103815	Mariquita and New Granada [S.E.]	1 0 0	⅝	⅜ ⅝	0 9 6	0 1 6	July, 1859

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call
35000	Alamillos (lead), Spain] L. £2]	1 0 0	—	1 1¼	Sept. 1864
100000	Anglo-Brazilian (gold) [L. £1] [S.E.]	0 5 0	—		Dec. 1863
20000	Beariz Tin Streaming Company [L. £1]	0 17 6	—		Oct. 1863
25000	Capula (silver), Mexico [L. £2] [S.E.]	1 0 0	—		Feb. 1864
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—		Jan. 1859
10000	Copiapo Smelting [L.], Chili	10 0 0	—		Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	⅜		Fully paid.
50000	East del Rey (gold), Brazil [L. £3] [S.E.]	1 5 0	⅛		Oct. 1863
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 12 0	—		Dec. 1863
8000	English and Canadian Mining Company [L.]	5 0 0	—		Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—		Fully paid.
50000	Frontino and Bolivia (gold), New Granada [L. £2]	0 10 0	—		Mar. 1864
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 10 0	—		June, 1862
24000	Hindostan (copper), Bengal [L. £5]	3 0 0	—		Feb. 1863
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—		Fully paid.
10000	Karbitz Colliery Company [L.]	1 0 0	—		Fully paid.
30000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0	—		Fully paid.
100000	Montes Aureos (gold), Brazil [L.] [S.E.]	2 0 0	2	1⅛ 2	Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	—		Nov. 1858
50000	Nova Scotia (land and gold) [L. £2]	1 0 0	—		Nov. 1862
10000	Otea (copper) [L. £2]	0 10 0	—		
15000	Pachuca Silver Mining Company, Mexico [L. £1]	1 0 0	—		June, 1863
50000	Panulcillo (copper) [L. £4] [S.E.]	1 0 0	1⅛	1⅛	Feb. 1864
6000	Peel River Land and Mineral [Limited]	100 0 0	—		Stock.
23000	Quebrada (copper), Venezuela [L. £10]	6 10 0	—		Sept. 1864
50000	Rossa Grande (gold), Brazil [L. £1]	0 5 0	—		April, 1864
10000	San Roque (lead), Spain	5 0 0	—		Fully paid.
60000	Santa Barbara (gold), Brazil [L. £1]	0 15 0	—		Sept. 1864
120000	Scottish Australian Mining Company [L. £1]	0 17 6	—		Feb. 1864
15000	South Europe Mining Company, Spain [L. £5]	3 0 0	—		May, 1860
12000	Teplitz Colliery Co., Bohemia [L. £5]	3 0 0	—		June, 1863
5000	Valgodemard Mining Company [L. £20]	8 0 0	—		June, 1864
50000	Vallanzasca (gold), Italy [L. £1] [S.E.]	0 10 0	1⅛	1⅜ 1½	Oct. 1864
45000	Victor Emanuel (copper), Italy [L.]	1 0 0	—		Fully paid.
1000	Western Africa Malachite (copper) [L.]	110 0 0	—		Oct. 1862
12000	Wheal Ellen (copper), South Australia [L.]	5 0 0	—		Fully paid.
?0000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	1		Fully paid.
75000	Yorke Peninsula [L. £1]	1 0 0	—	⅜ ⅛	Fully paid.

PROGRESSIVE MINES.

Shares	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
1000	Alt-y-Crib (lead) [L. £5]	4 12 6	—		July, 1864
6000	Bagtor (tin) [L.]	2 0 0	—		Fully paid.
4000	Bedford Cons. (cop.), Tavistk.	2 9 0	—		July, 1864
3200	Bedol Aur (lead), Holywell	0 12 0	1¼		June, 1864
2000	Berehaven (copper), Ireland	1 0 0	—		
500	Billins (lead)	30 0 0	12½		Fully paid.
6000	Boscawen (tin), Kenwyn	2 10 0	—		Feb. 1864
2280	Boscundle (tin, cp.), St. Austell	7 10 0	—		Sept. 1862
5000	Bottle Hill (tin) Plympton	1 8 6	—		May, 1864
30000	Bromlow (ld.), Minsterley, Salop	1 0 0	—		Fully paid.
200	Brynford Hall (lead), Flint	30 0 0	—		Aug. 1863
500	Bryn Gwiog (lead), Flint	9 0 0	25		June, 1864
1832	Bryntail (lead), Llanidloes	8 7 6	3⅛	3 3½	June, 1864
6380	Buller & Basset, (cp.) Redruth	4 11 6	—		Feb. 1864
12000	Calstock Consols (cop.), Calst.	1 17 6	—		
915	Calvadnack (tin), Wendron	25 3 6	—		Aug. 1864
1000	Camborne Consols (copper)	18 10 0	—		Feb. 1864
4600	Camborne Vean & Wh. Francis	9 18 4	—		June, 1864
75000	Cambrian Consolid. (gd.) [L. £2]	1 0 0	—		Aug. 1862
8000	Cape Cornwall (cop.), [L. £2 10s.]	1 0 0	—		Aug. 1864
12000	Caradon & Phœnix Cons. [L. £1]	0 10 0	1		
914	Caradon Cons. (cop.), St. Cleer	29 6 6	—		Sept. 1864
6000	Caradon Unit. (cop.), St. Neots	1 0 0	—		June, 1863
2580	Carmarthen United (lead)	5 0 0	—		Fully paid.
3000	Carnelloe (tin and cop.), Zennor	1 0 0	—		Jan. 1864
6000	Carn Camborne (cop.), Cambn.	1 11 0	34s.	32s. 34s.	Oct. 1864
3000	Carn Vivian (tin, cop., lead)	2 1 6	—		Nov. 1861
2048	Carnyorth (tin), St. Just	4 10 0	—		June, 1864
20000	Carysfort [3200 £2½ pd., 16800 £1 pd.]				
10000	Castleward, Ireland [L.]	1 0 0			Fully paid.
2500	Cefn Cilcen (ld.), Flint [L. £5]	2 8 6	—		Aug. 1864
800	Cefn Cwm Brwyno (lead)	4 0 0	—		Sept. 1864
2000	Central Grylls (tin) [L. £3]	2 10 0	—		Feb. 1864
2500	Central Minera (lead) [L. £5]	2 12 0	—		Aug. 1864
6000	Charlotte Untd., Perranuthnoe	5 2 8	—		Sept. 1864
3000	Chiverton Moor (lead)	3 0 0	—		Oct. 1863
3000	Chiverton Valley (lead)	3 0 0	—		Feb. 1864
4000	Clara Unit., Ponterwyd [L. £3]	2 2 0	—		Jan. 1864
1024	Cleer's Hill (tin), St. Stephen's	0 2 0	—		
787	Clijah & Wentworth (tin, cp.)	33 0 0	—		Aug. 1864
3000	Clowance Wood [L. £5]	2 0 0	—		Aug. 1864
16000	Coolartra & Bond [L.] [5300 £1 pd., 10700 12s. pd.]				Jan. 1864
50000	Connorree (cop., sulph.) [L.]	1 0 0	—	18s. 6d.	Fully paid.
6000	Cornish Clay and Tin [L.]	1 0 0	—		Fully paid.
861	Crane (copper), Camborne	24 0 0	—		June, 1864
30000	Crenver and Wh. Abraham [L.]	2 10 0	—		
12000	Crelake (cop.), Tavistock	2 13 0	—		April, 1864
2000	Crowlwm (lead), Llanidloes	1 11 0	—		Dec. 1863
6000	Cuddra (cop., tin), St. Austell	4 5 0	—		July, 1864
35000	Dale (lead), North Stafford	1 0 0	—		Fully paid.
1000	Darren (lead) [L.], Cardigan	6 8 0	—		May, 1864
2000	DeepLevel, Minera (ld.) [L. £5]	3 5 0	—		Feb. 1862
672	Ding Dong (tin), Gulval	44 10 6	—		Dec. 1863
30000	Dolfrwynog (gold) [L. £1]	0 15 0	—		June, 1864
1000	Durlo (tin), Lelant	8 12 0	—		Oct. 1864
1000	Eaglebrook (lead) [L. £20]	17 2 0	—		April, 1864
1000	East Basset and Grylls (tin)	2 7 6	—		Aug. 1864
6000	E. Bottle Hill (tin), Plympton	0 4 6	—		Aug. 1864
50000	East Cambrian (gold) [L. £1].	0 15 0	—		Feb. 1864
6000	East Carn Brea (cop.) Redruth	3 15 0	7⅛	6½ 7	Feb. 1863
2000	East Chiverton (lead)	2 10 6	—		Aug. 1864
50000	E. Clogau (gold), Merio. [L. £1]	0 6 0	—		Mar. 1864
4000	East Devon Gt. Consols (cop.)	1 14 0	—		May, 1864
2048	E. Falmouth (s.-ld.), Kenwyn	5 0 6	—		April, 1864
6000	E. Grenville (cop.), Camborne	2 7 0	7⅝	7½ 7¾	Aug. 1864
6000	E. Gt. Work (tin), Breage [L. £5]	3 10 0	—		Oct. 1864
4000	E. Gunnis Lake & S. Bedf. (cop.)	7 19 6	⅝		Sept. 1864
6145	East Jane (sil.-ld.), Cardinham	2 7 0	—		Mar. 1864
6000	East Laxey (lead) [L. £3]	2 0 0	2⅛	2 2½	July, 1864
1024	E. Margaret (tin), Uny Lelant	20 5 0	—		Aug. 1864
8000	E. Polberro (tin) [L. £1] [4000 £1 pd. 4000 2s. 6d. pd.]				Nov. 1863
3986	E. Providence (tin), Uny Lel.	4 9 8	—		Sept. 1864
5610	East Seton (cop.), Camborne	0 10 0	—		Dec. 1863
256	East Tolgus (copper), Redruth	88 0 0	—		June, 1864
1024	E. Treskerby (cop.), Redruth	10 1 0	6⅛	6 6½	Aug. 1864
9600	East Wheal Abraham (copper).	0 5 0	—		Aug. 1864
1190	E. Wheal Agar (cop.), St. Cleer	11 17 0	—		Sept. 1863
1300	E. Wheal Ellen (cop.) St. Agnes	0 7 6	—		April, 1864
2000	E. Wh. Fortune (tin) Sithney	1 0 0	—		April, 1863
2048	East Wheal Grylls (tin, cop.)	2 2 6	—		July, 1864
6000	East Wheal Metal (tin and cop.)	—	—		
4000	E. Wh. Russell, Tavis. [S.E.]	9 5 6	5	4½ 5	Sept. 1864
6000	East Wheal Vor (tin and cop.)	5 0 0	—		
2000	Erwfelin (lead), [L. £2]	1 0 0	—		
6144	Esther Und. (tin), Cardingham	0 3 10	—		Sept. 1864
6000	Fortescue Cons. (sil.), Endellion	0 12 6	—		
6000	Furze Hill Wood Cons., Buckl.	1 5 6	—		April, 1864
1026	Garden (tin), Morvah	4 17 9	—		May, 1863
4096	Garlidna Untd. (tin), Wendron	4 1 6	—		Mar. 1864
1000	Garreg (lead), Flint	5 14 6	—		Dec. 1863
4000	Gawton (copper), Tavistock	2 9 6	—		June, 1864
6000	Gen. Min. Co. for Irel. (cop.)	4 0 0	—		
30000	Glasgow Caradon Con. (cp.) [L.]	1 0 0	—		Fully paid.
32	Godolphin (cop., tin), Wrexham	4 0 0	—		Aug. 1864
5700	Goginan (silver-lead)	12 10 0	—		April, 1864
2000	Goich Hill (lead), Flintshire	1 4 5	—		No call.
6144	Gonamena (copper), St. Cleer.	4 9 0	—		Sept. 1864
2000	Goonzion (copper), St. Neot	1 12 6	—		Aug. 1864
486	Gramb. & St. Aub. (cp.) [S.E.]	63 0 0	—		Sept. 1864
5000	Great Brigan (cop.), Redruth.	6 11 6	—		Sept. 1864
4096	Great Caradon (cop.), St. Ive.	2 14 0	—		Sept. 1864
10000	Great Devon and Bedford [L.].	1 15 0	—		Mar. 1864
3000	Gt. East Lovell (tin), Helston	1 0 0	—		
5000	Great North Downs (copper).	4 0 0	4¾	4¼ 4¾	Sept. 1864
6000	Gt. Retallack (sil.-ld., blende)	2 6 6	—		April, 1864
6000	Great S. Chiverton (sil.-lead).	0 10 0	3⅜	3⅛ 3⅝	April, 1864
52000	Great Tregune Consols (cop.).	0 5 0	—		
3000	Great West Chiverton (lead)	1 0 0	—		June, 1864
3730	Great Wheal Baddern (tin)	6 16 0	—		May, 1863
10000	Gt. Wh. Metal, Breage [L. £2]	1 0 0	—		
6000	Gt. Wh. Busy (cop., tin), Ken.	13 14 6	2⅛	2 2½	April, 1863
3072	Gt. Wh. Grylls (tin, copper)	1 0 0	—		No call.
2500	Grit and Stapeley (lead), [L.]	10 0 0	—		July, 1864
2048	Grylls Consols (tin)	1 5 0	—		
4000	Grylls Wheal Florence (tin)	—	—		Jan. 1864
4910	Gurlyn (cop., tin), St. Erth	2 14 11	—		July, 1864
6068	Gwydyr Park Con., Llanrwst	1 7 3	—		Feb. 1864
6000	Hallenbeagle (copper)	1 0 0	3½	3⅞ 4⅛	July, 1864
6400	Harwood (ld.), Durham [L. £1]	0 6 6	—		Sept. 1864
5000	Havan (ld.), Cardigan [L. £5]	4 0 0	—		Feb. 1864
5000	Hazel Grove (sil.-ld.) [L. £1]	0 10 0	—		No call.
7219	Hawkmoor (tin, cop.) Calstock	3 6 0	—		Feb. 1864
5000	Hendre (lead), Flint [L. £5]	2 10 0	—		Sept. 1864
6000	Hingston Down (cop.), [S.E.]	5 10 6	4½		Dec. 1863
6000	Illogan (tin and copper)	0 12 6	—		Nov. 1863
5000	Kelly Bray (ld.), Callington.	5 2 6	¾		June, 1864
6000	Keswick (lead), Portinscale	5 6 6	—		Mar. 1862
96	Kilmorey (lead)	25 5 0	—		Feb. 1864
6000	Lady Bertha (cop.) [S.E.]	3 0 6	—		July, 1864
3000	Lanivet (tin), [L. £2]	1 14 0	—		Aug. 1864
1019	Leeds & St. Aubyn (tin, cop).	17 6 4	—		Feb. 1862
963	Lelant Cons. (tin), Uny Lelant	35 0 0	—		Mar. 1863
240	Llangan (ld.), Glamor. [L. £25]	20 0 0	—		Oct. 1863
4000	Llantwit Vardre (coal), [L. £5]	4 10 0	—		May, 1864
2000	Long Rake (lead), Flint	4 10 0	—		Oct. 1863
2000	Lower Park (ld.), Denbigh [L.]	3 11 0	—		Jan. 1864
6000	Maudlin (copper), Lostwithiel	4 2 0	—		April, 1864
4480	Merllyn (lead), Flint	4 1 6	—		June, 1864
3000	Minera Western Boundary [L. £1]	0 2 6	—		Sept. 1863
3000	Mineral Bottom (lead)	3 0 0	—		
5000	Molland (cop.), S. Moulton	2 9 6	—		Nov. 1862
1024	Nangiles (tin, copper), Kea	19 0 0	27	25 27	Sept. 1864
5000	Nanteos and Penrhiw [L.]	4 0 0	—		Fully paid.
4000	Nanteos (lead) [L. £1]	0 10 0	—		Sept. 1864
512	Nant Minera (lead), [L. £20]	6 0 0	—		Aug. 1864
6400	Nant-y-Iago (ld.), Merioneth	3 17 6	—		May, 1863
6000	New East Birch Tor (tin)	0 2 6	—		
10000	New Concord (sil.-ld.) [L. £3]	1 0 0	—		
12000	New Cornish [8000 £1 paid, 4000 7s. 6d. paid]				Mar. 1864
6400	N. Crow Hill (ld.), St. Stephen	2 12 6	—		Aug. 1864
6514	New E. Russell (cop.), Tavistk.	0 8 0	—		June, 1864
6400	Nether Hearth (lead), Dufton	0 18 6	—		Oct. 1863
400	New Hendra (tin, cop.), Breage	2 11 0	—		Aug. 1864
6400	New Pembroke (tin and cop.).	0 9 0	—		May, 1864
1024	New Rosewarne (cop.), Gwinear	2 0 0	11	9 11	Dec. 1863
6000	New S. Caradon (cop.), St. Cleer	0 16 6	—		Dec. 1863
5969	New Treleigh (cop.), Redruth	3 3 0	—		Mar. 1864
960	New Trevenen (tin), Wendron	7 4 0	—		Aug. 1864
470	Newtownards Min. Co., Down	50 0 0	—		
1024	New Wendron (tin), Wendron	7 0 0	4½		Jan. 1863
1024	New Wh. Grylls (tin and cop.)	2 1 6	—		May, 1863
4096	New Wheal Lovell (tin)	2 2 6	—		June, 1864
15000	New Wheal Martha (cop.) [L.]	1 0 0	1½	1¼ 1½	Fully paid.
4096	New Wh. Rose (ld. and blende)	0 5 0	—		Nov. 1863
400	New Wh. Seton (cop.), Camb.	24 15 0	—		July, 1864
6000	New Wh. Vor & Metal Utd. (tin)	0 2 6	—		May, 1864
1024	North Buller (cop.), Redruth	26 13 6	—		Sept. 1864

Shares.	Mines.	Paid.	Last Pr.	Bus. done.
6000	North Chiverton (lead	1 0 0	2½	2 2½
16000	North Devon (sil.-ld.) [L. £1]	0 13 0	2	
5000	N. Dolcoath (cop.), Camborne	3 1 6	—	1⅜ 2
6000	North Downs (cop.) Redruth	2 12 4	—	
2500	North Frances (cop.)	13 17 6	—	⅞ 1
1366	N. Grambler (cop.), Redruth	4 7 6	—	
6000	N. Gt. Work, Breage [L. £3]	2 9 0	—	
4096	North Grylls (tin), Germoe	0 6 6	—	
16000	N. Hallenbeagle [8000 £1 pd., 8000 8s. 6d. pd.]			
6000	North Jane (tin, silver-lead).	2 9 6	—	
2000	N. Levant (tin, cop.), St. Just	9 3 0	—	
20000	N. Minera (ld.) [15000 £1 pd., 5000 12s. 6d. pd.]			
4000	N. Phœnix (cop.) Linkinghorne	4 4 0	—	
6400	No. Pool (tin & cop.), Illogan.	1 15 8	—	
700	N. Roskear (cop.), Camborne	33 5 0	22	
6144	North Rosewarne (copper)	1 0 0	—	20 21
2000	N. Shepherds (sil.-ld.), Newlyn	2 0 0	—	
6000	N. Wh. Basset (cop., tin) [S.E.]	4 2 6	2½	2 2½
5610	North Wh. Crofty (cop.) [S.E.]	2 10 6	—	3
6144	N. Wh. Robert, Samp. Spiney	3 12 11	—	
1000	N. Wh. Seton, Camborne [L. £25]	2 10 0	—	
12288	Okel Tor (cop.), Calstock	2 3 10	—	
1000	Pant-y-Pydew (lead)	5 7 6	—	
8465	Pedn-an-drea (tin), Redruth.	4 3 6	—	
5000	Pendeen Cons. (cop.), St. Just	4 9 6	—	
5000	Penhalls (tin), St. Agnes	2 16 0	—	
512	Penhallow Moor (silver-lead).	3 0 0	—	
6000	Penrait (sil. ld.), Merion. [L.]	2 7 0	—	
200	Pentre Lygan (lead), [L. £30]	22 10 0	—	
6000	Polhigey Moor (tin), Wendron	1 18 0	—	
12800	Prince of Wales (tin), Calstock	0 6 0	5s.	4s. 5s.
8000	Princess of Wales (tin), Sancreed	1 0 0	—	
6000	Prosper Uni. (tin, cp.), St. Hilary	7 1 6	—	
10156	Redmoor (cop., tin), Callington	0 14 6	4s.	
512	Retanna Hill (tin), Wendron	2 17 6	—	
5000	Rhafna (lead), Carmart. [L. £1]	0 10 0	—	
4096	Rialton E. Wh. Rose (sil.-ld.).	—		2½
6000	Roborough Down (cop.) [L. £3]	1 0 0	—	
4026	Rosewarne Consols (copper)	4 11 6	—	
3848	Rosewarne United (cp., tin)	3 12 9	—	
6000	Roskear (copper), Camborne	0 10 0	—	
700	Roskearnowth (cop.), Camborne	1 10 0	—	
2000	Scorrier Con. (tin, cp.), St. Agnes	4 13 6	—	
800	Segienlas, Montgomery [L. £8]	5 0 0	—	
12500	Silver Moun. (lead) [L.]	2 0 0	—	
20000	Sil. Vein, St. Winnow [15000 £1 pd., 5000 5s. pd.]			
4096	Sithney Wheal Metal (tin)	3 10 0	1½	
12000	Sortridge Cons. (cop.) [S.E.].	1 1 0	—	
6000	So. Alfred (cop.), Phill. & Gwin.	0 12 6	—	
512	South Basset (cop.), Gwennap	16 10 8	—	
100	South Bryn Gwiog (lead)	7 0 0	—	
6000	So. Buller (copper), Gwennap	0 14 0	—	
4096	S. Caradon Wh. Hooper (cop.)	3 19 6	—	
6000	So. Carn Brea (cop.) [S.E.]	7 11 0	—	
6138	S. Condurrow (tin, cp.), Camb.	2 12 0	35s.	1⅜ 1½
2283	Sou. Crenver (cop.), Crowan.	12 9 0	—	
6000	South Darren (ld.) [L. £3½]	3 4 6	—	
6000	S. Dolcoath & Carnarthen Con.	2 13 0	—	
5000	S. Foxdale (ld.) I. of Man [L. £5]	2 10 0	—	
2000	South Gorland (cop.), St. Day	4 10 0	—	
2000	South Grylls (copper) [L. £10]	7 0 0	—	
1024	S. Herodsfoot (lead) Liskeard.	6 2 6	—	
96	South Kilmorey (lead)	23 10 0	—	
2000	South Lovell (tin), Wendron	2 0 0	—	
4000	S. Minera (lead) [L. £5½]	4 0 0	—	
96	South Pant-y-Gof (lead)	27 0 0	—	
5325	So. Phœnix (cop.) Linkin.	7 1 4	—	
6000	South St. Ives [L. £2 10s.]	0 5 0	—	
1024	S. Tresavean (cop.), St. Day	5 6 7	—	
937	So. Wh. Crofty (cop.), Illogan	19 18 10	14	
5791	So. Wh. Leisure (tin and cop.)	0 10 0	—	
400	So. Wh. Seton (cop.), Camborne	49 13 0	—	
794	Spearne Cons. (tin), St. Just.	6 12 0	—	
10000	St. Cuthbert Lead Smelt. [L.]	5 0 0	—	
40000	St. David's (gold) [L. £2 10s.]	1 5 0	—	
1024	St. Ives Wheal Allen (tin)	11 1 7	—	
8000	St. Just Untd. (tin) [L. 2½]	2 0 0	—	
6000	St. Just Consols (tin) [L. £1]	0 15 0	—	
640	Stamp Office (lead), Mold	1 0 0	—	
920	Stray Park (cop., tin) [S.E.].	33 15 6	25	21 23
3500	Tin Hill (tin), St. Austell	0 17 6	—	
6000	Tolcarne (cop.), Camborne	2 2 0	—	
6000	Tolvadden (copper), Marazion	1 0 0	—	
1600	Torbay Hematite Iron [L. £8]	6 7 6	—	
5000	Treloweth (copper), St. Erth.	7 8 8	—	
1024	Trencrom (tin), Uny Lelant.	12 12 3	—	
501	Tresavean and Trethurrap	12 10 0	—	
3105	Tresellyn and Scaddick Cons.	1 12 6	—	
5600	Trevenen and Tremenheere	7 1 6	—	
4096	Treweatha (sil.-ld.), Menhen.	5 12 0	—	
2048	Treworlis (tin), Wendron	6 15 1	—	
2500	Trimley Hall [1250 £1 pd., 1250 15s. paid]			
4000	Trumpet Unit. (tin), Wendron	1 9 6	—	
6400	Tyne Head (tin & cop. [L. £1]	0 17 6	—	
6000	Tywarnhaile (copper)	5 17 6	—	
20000	Vale of Towy (lead), Carmar.	0 15 6	8s.	5s. 6s.
4000	Wentnor [L. £2½] (lead)	2 4 6	—	
3000	Wentworth Consols (lead)	3 0 0	10	
60000	Welsh Gold, Dolgelly [L.]	1 0 0	1	
20000	West Beam (tin) [L.]	1 0 0	—	
40000	West Clogau (gold), Merioneth	1 0 0	—	
1000	West Cwm Erfin (lead) [L]	2 0 0	—	
1218	W. Condurrow (tin, cop.), Cam.	9 6 8	9s.	7s. 9s.
3500	W. Great Work (tin), Germoe	1 18 0	—	
6000	W. Grylls (tin), Perranuthnoe	0 4 0	—	
12000	W. Maria & Fortescue, Lamerton	1 0 0	—	
500	West Nanty (lead) [L.]	10 0 0	—	
19000	West Par Con. (cp.) St. Blazey	2 17 0	—	
1600	W. Rose Down (cop.), Caradon	12 10 0	—	
256	West Sharp Tor (cp.) Rillaton.	161 0 0	—	
1056	West Stray Park (cop.), Camb.	9 11 6	—	
512	West Tolgus (cop.), Redruth.	40 0 0	55	55 60
5481	West Trevelyan (tin, copper)	4 3 10	—	
512	West Wh. Frances (cop.), Illo.	92 5 0	30	28 30
9017	West Wheal Jane (tin, &c.)	3 16 10	—	
5000	West Wh. Kitty (tin), St. Agnes	0 7 0	—	
10000	W. Wh. Martha (cp. & sil.) [L. £2]	1 5 0	—	
4096	West Wheal Vor (tin)	1 10 0	—	
6000	Wheal Agar (copper), Illogan	5 11 0	—	
5990	Wh. Arthur (cop.), Calstock.	4 6 6	—	
256	Wheal Buller, Redruth [S.E.]	23 0 0	15	12 14
6000	Wh. Caradon (cop.), St. Ives.	2 2 6	—	
6000	Wh. Colenso (cop.), Marazion	0 1 0	—	
1000	Wheal Curtis (cop.), Crowan	8 13 4	—	
6000	Wheal Crebor (cop.), Tavistock	1 13 0	2½	2 2½
6000	Wheal Crofty (cop.), Illogan	1 7 6	—	
6144	Wh. Damsel (cp., tin), Gwennap	2 15 0	—	
4096	Wh. Edward (cop.), Calstock.	8 10 6	—	
1024	Wheal Emily Henrietta (cop.)	12 15 0	—	
4000	Wh. Emma (cp) Buckfastleigh	3 2 6	—	
2000	Wheal Falmouth & Sperries	6 11 0	—	
6000	Wh. Grenville (copper) [S.E.]	8 14 0	6⅞	6½ 6¾
1024	Wh. Grylls (tin), Perranuth.	4 14 0	—	
5120	Wh. Harriett (cop.), Camborne	4 11 6	—	
6000	Wheal Hartley (cop.), Gwinear	1 2 6	—	
3648	Wheal Hearle (tin), St. Just.	3 5 0	—	
2048	Wheal Hope (sil.-ld.), Perran	3 15 0	—	
6000	Wheal Ida (sil.-lead), St. Ive.	0 10 0	—	
4800	Wh. Ludcott and Wrey (lead)	3 14 8	—	
968	Wheal Margery (tin, copper)	20 6 10	—	
1000	Wh. Mary Hutchings (Plymp.)	0 13 0	—	
6000	Wh. Norris (tin, cp.), St. Cleer	3 14 7	—	
1024	Wheal Par (tin), St. Blazey	6 16 0	—	
6000	Wh. Pollard (cop.), St. Neot's	3 3 6	—	
1024	Wheal Polmear (copper)	3 13 9	—	
970	Wh. Prosper (cp., tin), Breage	13 18 10	—	
25000	Wh. Prudence St. Ag. [L. £1]	0 17 6	—	
240	Wh. Reeth (tin), Uny Lelant	96 10 0	—	
2000	Wheal Rose (copper), Scorrier.	—	38	
1500	Wheal Sarah (tin), Lanivet	0 9 6	—	
4096	Wheal Sidney (tin), Plympton	5 3 1	—	
2048	Wh. Sithney & Carnmeal Uni.	12 19 0	6	5 6
6000	Wheal Sparnon (copper)	0 12 0	—	
960	Wh. Trannack (cop.), Sithney	2 16 6	—	
6000	Wheal Union (cop.), Redruth	4 10 6	1½	
6000	Wh. Unity (cop., tin), Gwinear	14 15 0	5s.	⅛ ⅜
4096	Wh. Uny (tin, cop.), Redruth	9 12 0	4	3½ 4
4500	Wheal Vlow (copper)	0 9 0	—	
1024	Wh. Vyvyan (cop.), Constantine	9 15 0	—	
994	Worvas Downs (tin), Lelant.	7 7 0	—	
3097	Yarner (copper), Devon	3 15 6	—	

MISCELLANEOUS.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.
10000	Discount Corporatn. [L. £100]	17 10 0	16	13½ 13¾
125000	Gen. Cred. & Fin. Lond. [L. £20]	4 0 0	6⅜	6¼ 6½
150000	Inter. Financial Soc. [L. £20]	5 0 0	6⅝	6½ 6⅝

** Those mines with [S.E.] appended have been admitted on the Stock Exchange. Those mines with [L.] appended have been incorporated with Limited Liability.

** Our object being to make the Share List correct, we earnestly call upon all who have the power, to aid us, by forwarding any alterations or correction which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we appeal for information. Reports from mines—in fact, mining intelligence of every description, forwarded to our office, will meet ready attention.

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